THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

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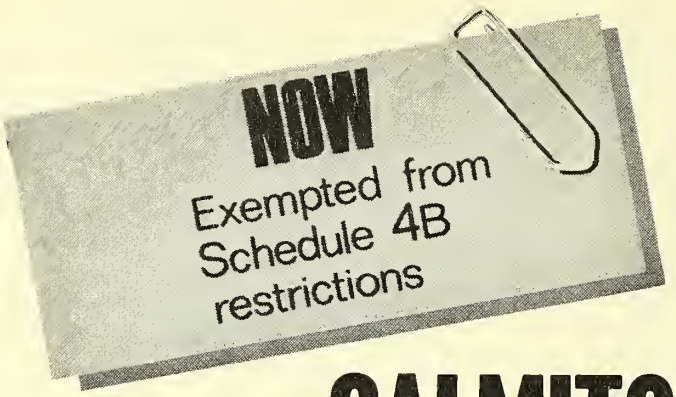

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The CHEMIST AND DRUGGIST

Volume 184 JULY 3, 1965 No. 4455

Writ against Society

OPPOSITION TO JULY 25 MOTION

A HIGH Court writ has been issued against the Pharmaceutical Society of Great Britain and its President (Mr. J. C. Bloomfield) by Mr. R. C. Miller Dickson, M.P.S., Loughborough Road, Ruddington, Notts. The writ is in connection with the special general meeting to be held on July 25 at the Royal Albert Hall, London, and concerns the first motion the President is to submit (see *C. & D.*, April 17, p. 394). The Society has been asked to give an undertaking that pending the trial of the action it will not proceed with or vote upon the first of the motions. The Society has stated it does not intend to give any such undertaking without a direction from the Court. If it should become necessary to postpone the meeting, notice will be given at the earliest possible moment. The High Court action is not concerned with the second motion.

The writ, issued in the Chancery Division claims the proposed motion is not within the powers or purposes of the Society. A declaration is also sought that the Society cannot prescribe or impose restrictions as to the place or premises in which new pharmacies may be situated, or the physical structure of new pharmacies. Another claim is that it is not within the powers of the Society to prescribe or restrict the services which may be provided, or goods which may be supplied from, or sold in new pharmacies, or in existing pharmacies, or in pharmacy departments of larger establishments.

An injunction is sought to restrain Mr. Bloomfield from moving the proposed motion or a similar motion. An appearance to the writ has been entered by solicitors acting on behalf of the Society and Mr. Bloomfield.

Automatic Cameras

INVESTIGATION BY *WHICH ?*

RESULTS of an investigation into twenty-one automatic cameras (one of them unobtainable in the United Kingdom) are given in the July issue of *Which ?*, published by Consumers' Association. After first explaining what can be expected from the various kinds of automatic camera control in terms of versatility and describing the limitations of such cameras a tabular summary is given of the features of those tested. Cameras included in the investigation were:—Agfa Optima 1a; Agfa Optima III; Coronet; Focamatic; Fujica 35-Auto M; Fujica 35-EE; Ilford Sportsmaster Manumatic; Konica Auto S (now S2); Konica EE-matic (now EE-matic-de luxe); Kowa H; Minolta Hi-matic 7; Regula Olymatic Auto-set 1; Ricoh Auto 35; Ricoh 35 Flex; Voigtlander Vito Automatic 1; Yashica Minimatic C; Zeiss Ikon Contessamat SE; Kodak Instamatic 300; Fujica Half; Olympus Pen EE S and Yashica Mimy. The report stresses the differences that were found among samples of cameras of the same brand and warn that purchasers should use the first film they put through a camera to test its performance. It is stated that in general the cameras tested took good photographs. For unambitious photographers the Kodak Instamatic 300 is recommended, while for those requiring a pocket camera either the Olympus Pen-EE S or Yashica Mimy is suggested. A warning is given against expecting pictures of 35-mm. standard from the smaller format. For photographers who require the greatest versatility in their camera the Konica Auto S and Minolta Hi-matic 7 are stated to be outstanding owing to the sensitivity and accuracy of their controls. The latter camera was stated to give the sharper pictures but two samples failed the Association's endurance test.

Weights and Measures

LABELLING REQUIREMENT POSTPONED

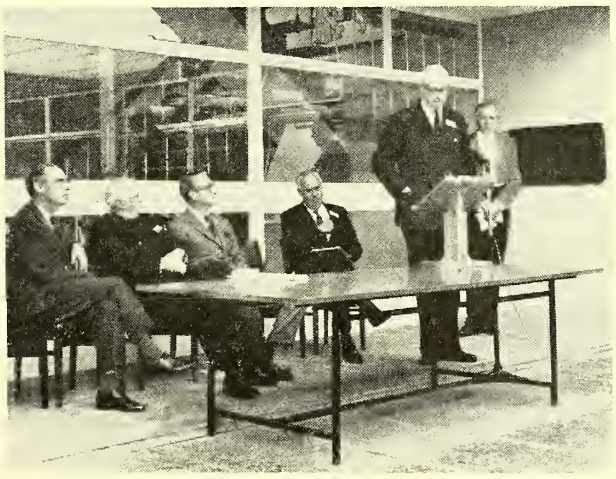
THE Board of Trade has laid before Parliament a draft order deferring for 12 months the requirement in the Weights and Measures Act 1963 that certain goods should bear an indication of quantity. The draft Weights and Measures (Exemption) Order, 1965 (H.M. Stationery Office, price threepence) applies only to those goods included in Schedule 7 of the Act such as perfumery and toilet preparations, soap, pet foods, detergents, etc. Certain provisions of the Act coming into operation on July 31 required that prepacked goods should bear an indication of the quantity of the goods. The new order provides an exemption from that requirement "in the case of any such goods which before July 31, 1965, ceased to be on the premises where they were pre-packed."

[See also p. 11.—EDITOR.]

Joint Assay Committee

SCOPE BEING WIDENED

THE joint committee of the Society for Analytical Chemistry's analytical methods committee and the Pharmaceutical Society is to expand its scope to embrace the standardisation, when the need exists, of methods of assaying drugs in general and not to restrict itself only to crude drugs. In the report of the analytical methods committee for 1964 recently published by the Society for Analytical Chemistry it is stated that no new requirements in the field of crude drugs have become apparent for some years. The joint committee feels however that it still has a useful function in setting up panels to standardise methods of assay



RESEARCH INSTITUTE OPENING CEREMONY: Professor Lord Todd, F.R.S., at the Wyeth Institute of Medical Research, Taplow, before unveiling the plaque to formally open the institute. Seated from left are: Dr. E. T. Borrows (research director), Sir Cecil Wakeley, F.R.C.S., Mr. H. W. Blades (president Wyeth Laboratories), Mr. P. Keddie (chairman and managing director, John Wyeth & Brother, Ltd.) (see p. 4).

of drugs when the need arises. A proposal to that effect has been approved states the report. It is reported that one new panel was set up during the year to recommend a method of assaying phenothiazine and a panel is to be set up to investigate the thin-layer chromatography of steroids.

Prices and Incomes Board

DECISION CONCERNING HAULAGE RATES

THE National Board for Prices and Incomes, chairman Mr. Aubrey Jones, has recommended that the practice of general rates recommendations by the Road Haulage Association "is not in the interests of the industry nor its customers and should be abandoned and he suggests that the Association's recommendations of a 5 per cent. increase in rates effective June 29 if not withdrawn should not be accepted by the industry's customers. The Board also make the comment that the terminal and handling costs are a major factor in the costs of the industry and it recommends that the industry, its customers and public authorities should co-operate in improving facilities.

Carriers' Licences

COMMITTEE SUGGEST "PERMIT PLATES"

THE report of the Committee appointed by Mr. E. Marples when he was Minister of Transport to examine the operation and effects of the system of carriers' licences has been published (H.M. Stationery Office, price 8s.). The Committee was headed by Lord Geddes. The Committee recommend the abolition of all restrictions on the capacity of the road haulage industry and on the work for which a lorry may be used. The report states there should be no statutory bar to entry to the hire or reward sector of the transport industry and that traders and manufacturers should be allowed to use their own vehicles for any work they choose to undertake. The Committee also recommend the introduction of a system of permits to ply as a carrier of goods to be available on demand but held subject "to good behaviour as regards all aspects of safety of lorries." Another recommendation is the introduction of a system of carriers' permit plates, one to each lorry, the plate to be forfeited during any period of suspension and would be summarily removed from any lorry found to be mechanically defective or overloaded. The Committee found there was little inefficiency in C licensed operations and what there was could be best reduced by allowing traders and manufacturers to use their lorries free of restriction as to what they might carry.

Chemists' Retail Sales

BOARD OF TRADE STATISTICS

THE index of retail sales by chemists and photographic dealers in April was 105 (average monthly sales in 1961 = 100), an increase of 6 per cent. over the same period a year earlier. Figures recently issued by the Board of Trade also reveal the following indices for the month:—

Independent retailers	101 (+ 2 per cent.)
Multiple retailers	110 (+12 per cent.)
Co-operative societies	106 (+ 5 per cent.)

The figures do not allow for receipts under the National Health Service.

IRISH NEWS

THE REPUBLIC

"Ignorance" Plea

DEFENDANT "UNLUCKY"

DEFENDING solicitor for Alice McCawley, a shopkeeper, of Ballynacargy, co. Westmeath, who was charged at Ballynacargy Court on May 6 with having sold Veganin tablets, containing codeine, and scour tablets, containing sulphadimidine on June 25, 1964, she not being legally qualified to sell and with the containers not being labelled with the name and address of the seller claimed the offence was a purely technical one. The Inspector of the Pharmaceutical Society of Ireland (Mr. P. Cummins) gave evidence of having purchased a packet of Veganin tablets and six tablets for scour in cattle. Mr. K. P. Wallace, defending, submitted that defendant was charged with not having a poison notice on something that was being sold by vanmen to shopkeepers. Mr. Cummins agreed it was possible defendant had bought the articles in good faith. Mr. J. G. Coleman (registrar, Pharmaceutical Society of Ireland), said the Society's function was to see that such articles were sold properly. He did not think the manufacturing company sold the tablets to the shopkeeper. The defendant was unlucky to be the person who sold the tablets. Liam McCawley, a nephew of the defendant, said his aunt was completely unaware that either of the tablets should not be sold by her. He was certain his aunt had bought the tablets in ignorance. He did not agree that the ordinary shopkeeper was well aware he should not stock such products. Submitting that it was a technical offence, Mr. Wallace said defendant was completely unaware that she was doing anything wrong. Mr. Gaynor argued that the defence was often put up that "someone else was to blame" but unless fines were imposed in cases of this nature the sale of such products by unqualified people would not stop. A total of £23 17s. in fines, costs and expenses was imposed.

Cosmetics Association

DISCUSSION WITH A MANUFACTURER

THE Irish Chemists' Cosmetics' Association has initiated a policy of meeting representatives of manufacturing companies and, by means of question and answer, obtaining a statement of policy for the benefit of the general pharmacist. The first meeting took place recently with representatives of Crystal Products (Eire). Ltd. The company was represented by Messrs. W. G. Prendeville and D. V. McCarthy, questions on behalf of the Association being put by Messrs. L. J. Manley, N. O'Farrell, Mrs. M. Mannion and Miss Tobin. It was stated the new policy of the company necessitated members purchasing lines in minimum packs. The Association claimed such packs were for the convenience of the packing department of Crystal Products only and led to unnecessary over-stocking by retailers. Crystal Products claimed that the policy led to greater efficiency on the part of the company, resulting in cutting of costs and higher profit margins for chemists. In a general order the policy would not be rigidly adhered to. The Association claimed that handling charges from 10 per cent. to 50 per cent. appeared to be charged on returned goods, and suggested that responsibility for returns rested with the company, owing to its policy of too-frequent promotions, making many lines obsolete before their time. Retailers felt they were financing the company's mistakes. MR. PRENDEVILLE replied that in future all problems relating to returns should be ironed out with the representative on the spot.

IRISH BREVITIES

THE NORTH

THE office of the Ulster Chemists' Association will be closed July 7-19.

PRESCRIPTIONS dispensed in Northern Ireland during February numbered 788,442 (536,152 forms). Total cost was £448,292 (£448,051 net), an average of 135·46d. per prescription (135·39d. net). Net cost of forms supplied during January was £317,453 and not as recently stated.

SOCIETY'S SCOTTISH DEPARTMENT

Annual and Branch Representatives' meetings

THE annual meeting of members of the Pharmaceutical Society resident in Scotland and the Scottish branch representatives' meeting were held jointly in Edinburgh on June 16, Mr. J. W. Goodchild in the chair.

THE CHAIRMAN extended a special welcome to the President (Mr. J. C. Bloomfield). Speaking of the changes which were taking place in the sphere of education and training the chairman said that the Royal College of Science and Technology was now the University of Strathclyde, the Heriot-Watt College was becoming the Heriot-Watt University this year and Robert Gordon's Technical College was also negotiating for a degree in pharmacy. Reconstruction had been necessary in turning the examination laboratories at 36 York Place into laboratories suitable for the Department of Pharmaceutical Sciences and for the Drug Testing Scheme for Scotland, which would be in operation shortly. He referred to the reinstitution of the position of divisional secretaries throughout the Scottish branches and said that almost all the parliamentary divisions in Scotland were represented. In conclusion the chairman thanked all his colleagues on the Executive for their support during his two years in office.

THE CHAIRMAN then called on Dr. J. C. Parkinson to give his address on "The Provision of a Planned Pharmaceutical Service" (report and discussion, see p. 13).

NEWS IN BRIEF

THE Text of the Single Convention on Narcotic Drugs, 1961, has now been published in one volume (H.M. Stationery Office, price 14s. 6d.).

REVISED entries for oxygen masks that may be ordered for National Health Service patients are among changes in the Drug Tariff (Scotland) effective from June 1.

MEMBERS of Bath Branch of the Pharmaceutical Society, impressed by a talk given by a surgeon from Bath Eye Infirmary, contributed £40 to a fund for the purchase of a laser for the Infirmary, recently.

THE Institute of Marketing has almost achieved its target of £70,000 to establish a chair of marketing at Lancaster University (see *C. & D.*, October 31, 1964, p. 441). A donation of £2,800 has recently been received from Aspro-Nicholas, Ltd.

THE Wellcome Trust has granted £6,000 to assist in the establishment of a clinical virology research group at St. Thomas's Hospital, London. It is hoped to investigate, among other topics, the viruses responsible for German measles, skin warts, and acute respiratory virus infections in children.

THE Harrison Memorial prize selection committee will, in 1966, consider making an award of the prize (bronze plaque and monetary payment of £105) to the British-born chemist not over thirty, who, in the opinion of the committee, shall have published the most meritorious and promising original investigations in chemistry during the five years ending December 1, 1965. Applications, nominations or information as to candidates must be received by the president of the Chemical Society, Burlington House, Piccadilly, London, W.1, not later than December 31. Applications or recommendations in respect of 1964 for the Corday-Morgan medal and prize awarded annually by the Chemical Society, must be received not later than December 31, 1965.

SPORT

Bowls

SCOTTISH CHEMISTS' BOWLING ASSOCIATION and ULSTER CHEMISTS' BOWLING ASSOCIATION. The annual match between the two Associations for the *Rexall Drug Co., trophy* took place at the Belmont bowling green, Belfast, on June 23. The first ten ends were fairly even but in the second half of the match the Scotsmen ran out easy winners by twenty shots (Scottish chemists, ninety shots. Ulster chemists, seventy shots).

Golf.

MANCHESTER PHARMACEUTICAL GOLFING SOCIETY. Two competitions recently held by the Society were at Cavendish golf club, Buxton, on June 2, and at Delamere golf club on June 16. *Results:* June 2. *Thomas Kerfoot & Co., Ltd., trophy and prize,* 1, E. Agnew; 2, R. Ogden. June 16, *Aspro-Nicholas, Ltd., prize,* 1, W. Eastwood; 2, B. Jenkins.

LONDON CHEMISTS' GOLFING SOCIETY.—"Delightful golfing weather" is reported to have favoured the Society's visitors' day held at Hadley Wood golf club on June 10. Twenty-five members and sixteen guests were present. *Results:* (Medal) *Johnson's of Hendon, Ltd., prize,* R. H. Davies (10), 70. *Jubilee vase and prize,* A. Talbot (14), 73. *Sanger's, Ltd., cup and prize,* J. R. Jenkins (24), 73. (Stableford) "*Aspro*" *rose bowl and prize,* J. A. Bennett (11), 33 pts. *Visitors' prizes,* C. J. Prior (7), 28 pts.; Dr. W. Cormack (16), 27 pts.

TOPICAL REFLECTIONS

By Xrayser

Now and then

I have spent a most interesting evening studying the pages devoted to shopfitting and display in last week's issue (p. 657 *et seq*). Inevitably, my mind has gone back over the years to my first acquaintance with the mysterious craft of pharmacy in the town in which I then lived. The range of that acquaintance was necessarily limited, for that was the era of the "family" chemist, and he knew us all. The pharmacy was not large—indeed, I should probably regard it today as extremely small. But it was bright and clean and shining, with brightly lit carboys in the windows. The druggist himself, I recall, wore a spotless white apron which any of the present-day detergent firms would have been glad to feature in their advertising. His "backcloth" consisted of beautifully polished shop-rounds with a fascinating bottom shelf of ointment jars, with domed lids, in attractive pink. The pinnacle of his art, to a small boy, was the wrapping of a bottle of medicine in a piece of white demy, finished off by closing the ends with sealing wax at a little gas jet. There was an atmosphere too, compounded, it seems in retrospect, of camphor and scented soap, and other strange odours which I later came to realise had their origin in an infusion pot. The windows held their own fascination, for there was a constant changing of the goods displayed which gave him an advantage where youthful interest was concerned over the neighbouring butcher and fishmonger. It is no easy matter to ring the changes on beef or herring, or, for that matter on the strangely named "working" boots. But our druggist had an endless and fascinating variety of goods to offer to the public gaze. One week it would be a veritable cascade of camphor lockets, in reds and greens and blues, retailing at one penny each—a very important and, indeed, invaluable amulet to wear round the neck (and next to the skin) to ward off infection. The next, it would be a large wooden case, with the lid ripped off to disclose huge quantities of solazzi liquorice stick in glossy black.

Seasonal display

The advent of winter would bring massed displays of bottles of cod-liver oil emulsion and jars of malt, with or without the nutritious oil of *Gadus morrhua*. And before long, spring would be heralded by the seasonal "chemical" food and, for those who thought they required it, a course of sulphur tablets to purify the blood. Anon, two other wooden cases would make their appearance, with lids ripped off as in the case of the liquorice, to disclose sponges from the depths of the sea, at 6d. or 9d. each. People did not go to that pharmacy to indulge in self-selection—they went to seek advice, help and guidance from a man who stood high in their regard and their affection, though if the truth were known his academic career probably did not exceed three months. His practical skills, like those of the pupils of Wackford Squeers, were acquired by *doing*. Such reminiscence dates me, and, as with Tom Moore, "I feel like one who treads alone some banquet hall deserted, whose lights are fled, whose garlands dead, and all but he departed."

A new generation

Just as I, when I entered pharmacy, regarded myself as of a new generation, so now I find myself looking on at the restless surge of a generation which would have no time for the nostalgia in which I have wallowed in the preceding paragraphs. Times have changed and people have changed, and merchandising methods have altered. We must press forward in the race and keep abreast of the times, and there is no pharmacy which cannot be improved by careful thought and by seeking the help of the expert in planning and fitting. But having said that, I would urge upon the new generation that they do not forget in their enthusiasm, that the need exists for pharmacy presenting to the public a face which indicates that the primary function of the pharmacist has not changed. Come to think of it, along with many others, perhaps I shall have an opportunity of saying so on July 25 at the Albert Hall.

A Research Centre Opened at Taplow

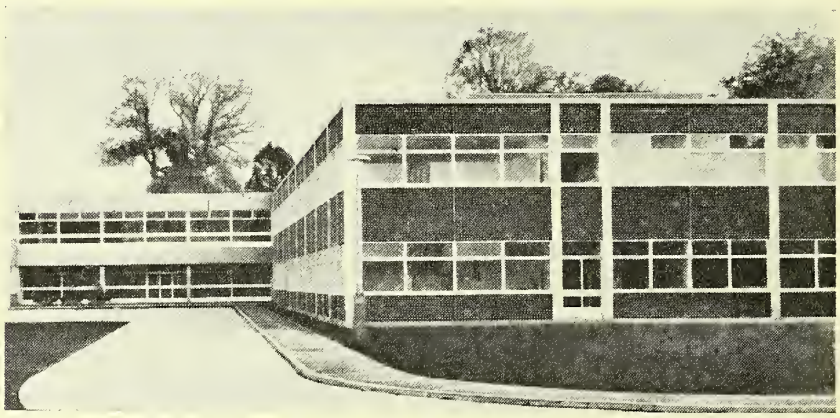
LORD TODD ON HIGH COST OF FINDING NEW DRUGS

SEVERAL compliments were paid to the pharmaceutical industry by Professor Lord Todd, F.R.S. (professor of organic chemistry, University of Cambridge), when he formally opened a new £500,000 institute for medical research at Taplow, near Maidenhead, Berks, on June 22. The institute, a 40,000-sq. ft. two-storeyed building, was recently completed for John Wyeth & Brother, Ltd., and is adjacent to the company's headquarters.

Public are " Not Aware "

In the course of his speech Lord Todd said he doubted very much whether the public at large realised the enormous research effort mounted by the individual firms which made up the industry—or its very high cost. Not only was continuous and extensive chemical research maintained in the search for useful drugs, but alongside it a great deal of biological and medical research which was equally vital in pursuit of the industry's aims—the provision of safe and effective drugs to remove or prevent the ills to which mankind was heir. Lack of appreciation of that had led to a good deal of ill-judged and hasty criticism of the pharmaceutical industry in recent years. For that reason he personally welcomed the setting up of the present Committee of Inquiry by the Government and he was certain that its report would rebound to the credit of the pharmaceutical industry and remove many of the current misconceptions about it. Their removal was important for at a time when the need to export was clear and urgent, it was plain that a flourishing pharmaceutical industry was a vital component of the economy. Many major contributions to the development not only of medicine, but of the chemical and biological sciences had come from the enlightened use of research within the pharmaceutical industry. After wishing success to the institute and to those who worked in it, Lord Todd unveiled a plaque in the presence of over 100 guests amongst whom were representatives of universities, the pharmaceutical and medical professions as well as the industry, the Ministry of Health and other Government departments.

Earlier, when introducing Lord Todd, MR. P. KEDDIE (chairman and managing director) said that Wyeth appreciated to the full the paramount necessity for research and development in the pharmaceutical field and had long been active in that connection in Philadelphia, U.S.A., and more recently in the United Kingdom. They had commenced their research activities some seven years ago at Havant, near Portsmouth. Realising that facilities there might become limited, they decided to build the present institute which would allow greater space and facilities for an enlarged team of scientists composed of many disciplines. A research institute as a building with its facilities may be imposing, but it was people with intelligence, ideas and initiative together with acute observation which really spelt successful research and development.



A view of the new research institute at Taplow, near Maidenhead, Berks.

SIR CECIL WAKELEY also spoke of the achievements made possible by research workers in the pharmaceutical industry. " As a surgeon," he said, " I have not been so intimately involved with the products of this industry as my colleagues in clinical medicine. But even in my own sphere there has been a chemotherapeutic revolution. No company such as this is content merely with the rôle of manufacturing pharmacist or chemist. The pharmaceutical industry still exists primarily to serve the needs of doctors in the treatment of their patients, but it is now in step with the doctors, both in anticipating many of his needs and in a research partnership that concerns itself more and more with the advancement of the psychological and biochemical sciences."

On the ground floor of the new research block are housed the two main chemistry departments, medicinal chemistry and natural products chemistry. Here, too, are the physical chemistry, large-scale chemistry and radio-isotope laboratories. Centrally placed on that floor are the laboratories, sterile suites and constant temperature rooms of the future microbiological department, due to be transferred from Havant in the near future. Pharmacology, together with toxicology and the small-animal colony, occupy most of the first floor of the institute. The animal colony serviced from a central corridor running the length of the building, has been designed to minimise contact between clean and soiled materials and to prevent the development of animal odours. Also in that unit are an animal behaviour observation room and a fully-equipped operating theatre. The pharmacy laboratories of the product development department are on the ground floor. The final sections of research, chemical development, chemical manufacturing and accommodation for large animals remain in Havant where they were established some seven years ago.

BRITISH ENCAPSULATION PLANT

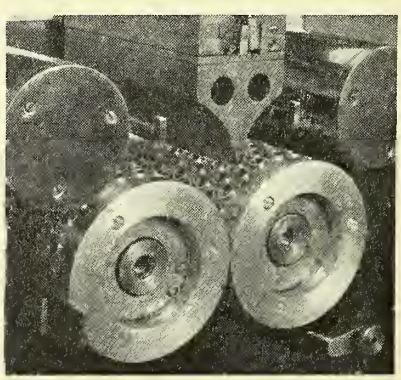
Now available to manufacturers

THE popularity of soft gelatin capsules has increased so greatly in recent years that the annual consumption in the United Kingdom alone runs into thousands of millions. Manufacturers can now buy a complete all-British encapsulation plant, have it installed on their own premises, serviced by experts and obtain dies and full technical advice on the operation and maintenance of the equipment.

The new machine, known as the encapsulating machine SSC1, is manufactured by P. Leiner & Sons, Ltd., Treforest, Glam, and can produce capsules by the million in a variety of shapes, sizes and colours.

Complete Plant

According to the needs of manufacturers, Leiner can either supply their encapsulating machine model SSC1 by itself, or they can provide a complete encapsulation plant, when the package plant comprises the design, layout and erection of the entire installation, the drying, mixing and encapsulating machines, capsule finishing and ancillary equipment. The Leiner service includes the provision of skilled supervisory technicians until the whole plant is in operation, and a comprehensive



Close-up view of the rotary encapsulating dies.

after-sales service. Dies can be cut to customers' own specifications in the Leiner engineering workshops.

The SSC1 machine incorporates all the features that make for simplicity, accuracy and economy in producing capsules in the customer's own plant. "It makes uniform soft gelatin capsules with varying precision fills, enabling the finished product to be marketed in precisely measured amounts and dosages." The process is equally suitable for liquids, suspensions and pastes, which can be filled into capsules of many shapes, sizes and colours. Leiners can also supply, as part of their encapsulation service, a wide variety of tested gelatin capsule-base materials but, for manufacturers who prefer to buy gelatin for making their own capsule base, Leiners can supply a range of high-quality pharmaceutical gelatins.

The SSC1 encapsulation machine at right, with the ancillary drying equipment.

Dosage Accuracy

The greatest popularity of soft gelatin capsules is in the pharmaceutical industry. The company suggest that the high degree of dosage accuracy attainable with the Leiner encapsulating machine—especially in cases of high-potency, accurate-dosage medicinal substances—opens up possibilities for encapsulating a wide variety of medicaments hitherto marketed in other presentations. Soft gelatin capsule formulation in the chemical and allied industries is rapidly gaining favour, while in the cosmetic field, the great versatility in shape and colour of gelatin capsules provides possibilities for the introduction of new products or the re-design of existing products.

Leiners have a complete plant at Treforest demonstrating precisely how the machines work and the nature of the services, conditioned air, etc., required. In actual production runs customers may see recommended capsule bases demonstrated and the testing out of new dies to their particular requirements of precise shape and size. While the installation of a Leiner encapsulating plant is flexible to such a degree that it can be accommodated in existing buildings, the demonstration plant is at the disposal of manufacturers to enable their planning engineers to achieve optimum results and to train their own personnel in the management and maintenance of a complete encapsulating plant by comprehensive training under Leiner chemists and engineers.

IN PARLIAMENT

By a Member of the Press Gallery, House of Commons

When Mr. A. E. Hunter asked the President of the Board of Trade if he was aware that the use by manufacturers and retailers of retail prices in guineas was confusing to the public and if he would take steps to abolish the practice, Mr. George Darling (Minister of State, Board of Trade) on June 24 said he was not aware of any serious confusion as a result of the practice.

Chemical Imports

Mr. Derek Page asked the President of the Board of Trade if he would compile and make available statistics of imports of chemicals that were not made in the United Kingdom during November 1964–May 1965 inclusive and November 1963–May 1964 inclusive.

Mr. E. Redhead (Minister of State, Board of Trade) in a written answer on June 23 regretted that it was not possible from the trade statistics, to ascertain those chemicals which were not made in the United Kingdom.

Retail Prices Index

Mr. R. J. Pounder asked the Minister of Labour what was the percentage increase in the cost of living between October 15, 1964, and June 15, 1965. Mr. E. Thornton (Joint Parliamentary Secretary), in a written answer on June 24, said that the percentage increase in retail prices between October 13, 1964, and May 18, 1965—the latest date for which the index was available was 4·2.

Prescriptions Dispensed

Lord Balniel asked the Minister of Health a number of questions concerning prescriptions dispensed by chemists in England and Wales. In a written reply on June 24 Mr. Kenneth Robinson (Minister of Health) provided the following information:—

Year	Numbers of prescriptions dispensed in January	February	March
1964	19,830,259	18,396,022	17,678,895
1965	18,579,479	20,775,870	23,735,830
Difference compared with 1964	*Decrease*	*Increase*	*Increase*
	per cent.	per cent.	per cent.
(*a*) Unadjusted	6·3	12·9	34·3
(*b*) Related to the number of working days in the month	2·7	17·6	19·3

The Minister also informed Lord Balniel that the cost of prescriptions dispensed by chemist contractors in England and Wales for the months January, February and March 1965 was respectively £9,599,936, £10,344,473 and £11,778,871. Lord Balniel asked the Minister what was his present estimate of the additional cost during 1965 to the National Health Service as a result of the abolition of the prescription charge. Mr. Kenneth Robinson's reply was that heavier prescribing than had been expected in the months immediately following removal of the charge was influenced to an unknown extent by the incidence of sickness.

Exhibition Centre

Mr. Douglas Jay (President of the Board of Trade), and Lord Rhodes (Parliamentary Secretary of the Board of Trade), made statements in the House of Commons and House of Lords respectively concerning proposals for the construction of a national exhibition centre. Mr. Douglas Jay said the most promising site for such a centre appeared to be the Crystal Palace, and the greater London Council had been asked to undertake urgently, the preparation of costed plans for the exhibition, and a fully detailed study of its revenue earning prospects based on support from industry. If the inquiries produced a satisfactory result, the objective would be to have the exhibition ready for use in the Autumn of 1970.

Medical Education

The Prime Minister (Mr. Harold Wilson), on June 29, announced the appointment of a Royal Commission on Medical Education. The terms of reference would be: "To review medical education, undergraduate and post-graduate, in Great Britain and in the light of national needs and resources . . . to consider what changes may be needed in the pattern, number, nature or location of the institutions providing medical education or in its general content." Lord Todd would be the chairman. The names of the other members would be announced later and there would be approximately equal numbers of medical and non-medical members. The Prime Minister said that the appointment of the Commission marked the importance which the Government attached to a fundamental review of the whole structure of medical education, its organisation, content and claims on resources. Meanwhile the Government were carrying out a review of the immediate measures which could be taken in the field of medical manpower and the appointment of the Commission would not delay any action which needed to be taken as a result of this review.

HOUSE OF LORDS

Shops: Early Closing Days

THERE was a second reading of the Shops Early Closing Days Bill in the House of Lords on June 24.

LORD HAIRE pointed out that the main purpose of the Bill was to give the occupier of the shop the freedom to choose which day he wanted as his weekly early closing day. At present, the local authority, with certain exceptions, had power to fix weekly half days for shops in their area. The Bill under discussion gave any trader the right "to be the odd man" out, although the present Act showed that traders working through their local Chamber of Commerce or co-operating in some other way, normally selected the same early closing day. A clause in the Bill enabled the occupier of a shop to vary a selected day, but he might not vary it more frequently once every three months.

LORD DERWENT said he understood the Government intended to introduce legislation over a much wider field than that of the Shops Act. He wanted to know how soon an announcement would be made and in what form it would take. LORD ROYLE as one who had engaged in the retail trade over the "larger part" of his life thought the Bill was but common sense. Provided the shop keeper allowed his assistants to have the requisite time off he should be the person to decide what the closing day or half day should be. In general, he was not in favour of longer shopping hours, he agreed that the "late evening" had been of advantage to many, but at the same time, he never believed that the shop keeper should be the slave of the public in that way. He added "in these days of full employment, it is difficult for shop owners to obtain staff and it is quite impossible for assistants to work reasonable hours, and yet provide the public with longer shop opening hours. He felt that the Bill was a way out of the difficulty.

Greater Flexibility

LORD STONHAM said that the outline proposals for a comprehensive review of the Shops Act 1950 in relation not only to Sunday hours of trading but also weekdays were almost ready. He hoped it would be possible to publish them before the Summer Recess. Their object was to secure greater flexibility in retail trading arrangements rather than to impose further restrictions. They were also designed solely to test the reactions and to secure the comments of employers, traders, local authorities, and the general public. The proposals would not be in legal form and would therefore be intelligible to all.

Referring to the Bill under discussion, Lord Stonham declared he was confident that the selection of the most suitable early closing day could be left to the sound economic sense of the traders concerned assisted perhaps by discussion in their own individual trading organisation or even among groups of neighbouring shop keepers.

The Bill was read a second time and approved without a division.

LEGAL REPORTS

German Patent Infringed

THE Dusseldorf district court has recently ruled that the tetracycline, supplied to a German company by Spofa, Prague, infringed a German patent held by American Cyanamid Co. The court held that Spofa's tetracycline process "is dependent on" Cyanamid's Duggar patent (No. 869,679) for production of the first of the tetracycline-type antibiotics, aureomycin chlortetracycline. The Spofa process, the decision stated, "employs all of the characteristics" taught by the Cyanamid patent, "and merely in addition thereto bromine is incorporated whereby tetracycline rather than chlortetracycline is formed as the final product." The court prohibited further sale of the Spofa material by the defendant, Impfstoffwerk Friesoythe Dr. Meiners & Co.

COMPANY NEWS

Previous year's figures in parentheses

CUSSONS GROUP, LTD. — Mr. Frank L. Chaplin has retired from the board but remains as a consultant to the company.

CHESEBROUGH-POND'S, LTD.—Mr. Melville Dungey (formerly general manager, marketing) has been promoted to market development director.

UPJOHN, LTD.—Mr. J. Alex. Smith, M.P.S., has been appointed managing director in succession to Mr. Alistair A. Smith, who is appointed vice-chairman.

GEIGY (U.K.), LTD.—The whole of the Geigy activities in the United Kingdom were merged into one company Geigy (U.K.), Ltd. (formerly Geigy (Holdings), Ltd.), from July 1. Four new operating divisions, dyestuffs and textile chemicals, industrial chemicals, pigments and pharmaceuticals, have been formed each of which integrates its marketing and manufacturing facilities and has a divisional managing director. The pharmaceuticals division, which supersedes the Geigy Pharmaceutical Co., is headed by Mr. D. C. Buchanan, B.Sc.; he is assisted by Mr. R. C. Whitehouse, M.P.S. (manufacturing director), Mr. S. W. Kipling, B.A., M.P.S. (marketing director) and Dr. R. H. Gosling (medical director). The board of the new company is to be the same as that of the previous holding company, except Mr. H. Clayton has been appointed a deputy chairman, and Mr. J. A. Rodgers and Dr. H. B. Knuchel have been appointed managing director and deputy managing director respectively.

Mr. D. C. Buchanan.

SANITAS TRUST, LTD.—Mr. R. Aylmer Hall (managing director, Wright Layman & Umney, Ltd.), has been appointed a director of the Sanitas Trust, Ltd.

UNICHEM, LTD.—Because of increasing personal business commitments, and family illness, Mr. Trevor Cale, M.P.S., whilst continuing as a director, has resigned as chairman of the company. Mr. J. Howard Evans, M.P.S., who has been appointed chairman, is succeeded as deputy chairman by Mr. E. G. Smith, M.P.S.

ASPRO NICHOLAS, LTD. — Mr. M. A. Nicholas (chairman) states that in all divisions of the group the prospects for the future are bright. Overall sales increased by 7 per cent. in the year ended March 31 and the group trading profits advanced from £1,736,695 to £2,093,153. Dividend is raised from 15 per cent. to 17½ per cent. The Continental companies established record sales and profits while results in other overseas markets proved "very satisfactory" with nearly all companies showing increased profits. Total exports from U.K. increased although those of fine chemicals fell, due to increasing low-priced competition chiefly from Continental sources. Exports of prescription pharmaceuticals also reached a record figure. In the home market trading profits improved.

Voluntary Liquidation

J. J. McMAHON, LTD., 12 New Bridge Street, Newcastle-on-Tyne, 1. Liquidator: Mr. E. Taylor, 51 Grainger Street, Newcastle-on-Tyne, 1.

BUSINESS CHANGES

MR. R. O'FLAHERTY, M.P.S., has closed his pharmacy at 7 Eton Wick Road, Eton Wick, Windsor, Berks.

DU PONT CO. (UNITED KINGDOM), LTD., have removed to 18 Bream's Buildings, Fetter Lane, London, E.C.4 (telephone: Chancery 9044), from Jermyn Street, S.W.1.

MR. H. N. WHALVIN, M.P.S., has acquired the pharmacy of Mr. M. England, M.P.S., Market Street, Charlebury, Oxfordshire, as from July 1. For the past fifteen years Mr. Whalvin has been manager of the pharmacy, perfumery and electro-medical departments of A. W. Gamage, Ltd., London.

AMES CO., division of Miles Laboratories, Ltd., have set up a new marketing organisation with headquarters at Stoke Court, Stoke Poges, Bucks, to handle the Ames products in nineteen countries and also in Eastern Europe. It will be headed by Mr. T. C. Black, who will hold the title commercial director, Ames Europe, as well as that of joint-managing director, Miles Laboratories, Ltd.

Appointments

THE National Research Development Corporation has appointed Mr. M. W. Innes, controller of commercial services.

ARMOUR PHARMACEUTICAL CO., LTD., Eastbourne, have promoted Mr. B. Beesley to sales promotion manager.

ARTHUR H. COX & CO., LTD., have appointed Mr. W. A. Lilley,

M.P.S., 37 Downshire Road, Belfast, their representative for Northern Ireland.

E. R. SQUIBB & SONS, LTD.—Mr. Peter D. Peiser has been appointed assistant managing director. Formerly general manager, Mr. Peiser has served in home and overseas markets of the company since 1952.

BOOTS PURE DRUG CO., LTD., Nottingham, announce that Mr. E. A. Hollins (territorial general manager in the Middlesex area) retired on June 30 and that Mr. K. Jervis (assistant territorial general manager) has been appointed to succeed him. Mr. J. A. Murray (territorial general manager, North and East Yorkshire) also retired on the same day. He is to be succeeded by Mr. J. R. Jobson who moves from being a territorial general manager in a West London territory. Mr. J. J. E. Fergusson (assistant territorial general manager) succeeds Mr. Jobson.

IMPERIAL CHEMICAL INDUSTRIES, LTD., have appointed their first regional commercial managers, who will represent all the divisions of the company. Mr. R. L. Bewick will be located at Templar House, High Holborn, London, W.C.1, and will be responsible for South Wales, the Midlands and Southern England. Mr. E. D. Carey, who will operate from I.C.I.'s Manchester sales office at Piccadilly Plaza, will cover Scotland, Northern Ireland, North Wales and Northern England. In certain cases, one or other will be given nation-wide responsibility for liaison with a specific industry located predominantly in his particular territory.

PERSONALITIES

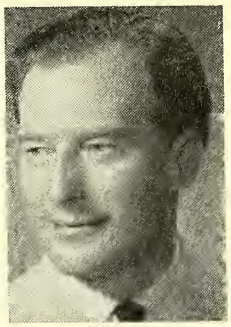
DR. W. B. HUGO, who is a senior lecturer in pharmaceutics at Nottingham University, has been elected to a readership in pharmaceutics from August 1.

SIR GEOFFREY ELEY, who retired from the chairmanship and from the board of B.D.H. Group, Ltd., in May, was guest of honour at a dinner recently attended by directors of both B.D.H. Group, Ltd., and The British Drug Houses, Ltd. To mark the occasion the group directors presented Sir Geoffrey with a 2 ft. long grey stone carving emanating from Pakistan and dating back to the third or fourth century.

MISS G. THOMPSON, who has been chief pharmacist at Derbyshire Royal Infirmary, Derby, for the past nineteen years, retired on July 4. After starting her career at a Carlisle pharmacy, she qualified at the Royal Dispensary, Edinburgh. Miss Thompson was a partner in a pharmacy at Glasgow, worked in Nottingham hospitals and at the Cumberland Infirmary before moving to Derbyshire Royal Infirmary in 1943 as assistant pharmacist. She was promoted to chief pharmacist three years later.

MR. J. E. BURRELL, who succeeds Commandant B. J. Anderson as president of the Irish Pharmaceutical Association showed as vice-president, that he possesses the right qualities to lead such a body. At the last Pharmacy Week he won praise for his address and he chaired with distinction a symposium on the health services. Born in Tipperary, he was educated at Rockwell College and the College of Pharmacy, Dublin. He served his apprenticeship in the pharmacy of Mr. P. J. Moloney, Tipperary, and qualified in 1958. Since then he has been manager of Errigal Pharmacy, Drimnagh, Dublin.

MR. J. ALEX. SMITH, M.P.S., who has been appointed managing director of Upjohn, Ltd. (see page 6), joined the company in January 1955 as a medical representative. After serving as an area supervisor, he became divisional sales manager for the Northern division in 1960 and was appointed home sales manager in 1962. He became assistant managing director in October 1964.



MARRIAGES

MITTEN — SPRIGGS. — Recently, Robert Charles Mitten, M.P.S., Glynavon, Petersfield Road, Midhurst, Sussex, to Hilary Jean Spriggs, Fyning Lane, Rogate, Petersfield, Hants.

DEATHS

ADCOCK.—On June 12, Mr. Arnold Isaac Adcock, M.P.S., 40 Freshwater Drive, Haughton Green, Denton, Lancs. Mr. Adcock qualified in 1922.

CLARK.—On June 17, Mr. Edward Charles Clark, M.P.S., 15 Queen's Avenue, Dorchester, Dorset. Mr. Clark qualified in 1920.

DERRY.—On May 28, Mr. Herbert Norman Derry, M.P.S., 11 Vine Parade, Wivenhoe, Essex. Mr. Derry qualified in 1935.

FAHEY.—On June 7 (see *C. & D.*, June 19, p. 627); MACMANUS, on June 11 (see *C. & D.*, June 26, p. 651). *Mr. P. J. Morgan* writes: The Irish Chemists' Golfing Society, that great compounder of pharmaceutical friendships, has received a very severe blow by the death of two of its most senior members. Phil Fahey and Ned MacManus were friendly rivals as regards age. I think Ned had the edge, which Phil gladly conceded. At any rate, Phil was the senior apprentice—and that meant something in those days. Ned MacManus, a past captain, died within five days of his old friend. That he won more prizes with the Society than anyone else, goes without challenge and that he appreciated every one of them is also a fact. A wonderful golfer and champion, apart from receiving the accolade of a golfer by playing in his company, it was also a wonderful experience. A successful business man, great sympathy is felt for his family. Phil Fahey was a past-president of the Society and a past-captain. That there will never be another like him is for sure, and that his memory will live long is undeniable. His gentle manner, like his successful business, was the envy of all. The Golfing Society, his great monument, will miss him most, but I am sure it will carry on his tradition as a further tribute. Lighthearted, with an infinite capacity for enjoying the companionship of his fellow men, generosity was his only vice. He knew exactly what pleased each member of the Society and acted accordingly. I don't know what we shall do without Phil Fahey, but to carry on as usual would, I am sure, be his ardent wish. Both of these great gentlemen were with us at our recent Tramore meeting, but now

"Boundless and bare
The lone and level sands stretch far away."

May they rest in peace.

NEWTON.—On June 20, Mr. Basil Henry Cameron Newton, M.P.S., 1028 Anlaby High Road, Hull, Yorks. Mr. Newton collapsed and died after taking part in fighting a fire which broke out at his weekend bungalow at Brighame Sailing Club headquarters. Mr. Newton, who qualified in 1933, was treasurer of the Hull Pharmaceutical Committee. He was also chairman of the Hull Branch of the Pharmaceutical Society in 1951. He leaves a widow and a married son who is also a pharmacist.

NOTTINGHAM.—On June 10, Mr. Raymond Nottingham, M.P.S., The Shieling, Spratton, Northampton. Mr. Nottingham, who qualified in 1928, joined Philadelphus Jeyes & Co., Ltd., shortly afterwards became a director of the company in 1936, and joint managing director in 1949. He was a past-chairman and secretary of the Northampton Branch of the Pharmaceutical Society, a member of the Northampton Executive Council, and a member of the Joint Veterinary-Pharmaceutical Committee.

RUSSELL. — Recently, Mr. David Hunter Russell, M.P.S., Rhu Ellen, Ardrossan Road, Seamill, West Kilbride, Ayrshire, aged sixty-five. Mr. Russell, who was superintendent pharmacist of Killwinning Co-operative Society, Ltd., died on the day of his re-retirement. Only three hours before his death he had been presented with a writing bureau by his colleagues at that society, for whom he had worked for twenty years.

SEIDEN. — Suddenly, on June 12, Dr. Rudolph Seiden, 700 East 63rd Street Terrace, Kansas City, 10, U.S.A. Dr. Seiden, who was vice-president, pharmaceutical research and control, Haver-Lockhart Laboratories, went to the United States from Austria in 1935 and joined Haver-Glover Laboratories (predecessor to Haver-Lockhart) in 1938. He was due to retire during the present year. Dr. Seiden devoted much of his spare time to reviewing professional literature on production of pharmaceuticals and medical chemistry and his fluency in German, French and English served him well in keeping abreast of current technical literature. Since March 1964 Dr. Seiden contributed to THE CHEMIST AND DRUGGIST in the monthly feature "The Drug World in America," Dr. Seiden's last contribution appears on p. 15.

NEW PRODUCTS AND PACKS

PHARMACEUTICAL SPECIALITIES

Folic Acid Preparations.—Vitamins, Ltd., Upper Mall, London, W.6, have introduced Pregnavite forte (F.). In tablet form, the preparation is an addition to the Pregnavite range making it possible for the prescriber to supply folic acid 5 mgm. per tablet in addition to those vitamins and minerals present in Pregnavite forte. The company is also making available to the chemist Vitavel brand folic acid 5 mgm. in packs of 100 tablets.

Against "Stomach Upsets."—Mayfair Chemicals, Ltd., 40 Shepherd Street, Mayfair, London, W.1, have recently introduced Enterosan tablets in the London area and are now marketing it through wholesalers throughout the United Kingdom. The product is stated to combine the therapeutic advantages of di-iodohydroxyquinoline "with the antispasmodic sedative and absorbent properties of its other ingredients." Each tablet contains di-iodohydroxyquinoline 100 mgm., chlorodyne B.P.C. 0·12 mil., tinct. belladonna 0·06 mil. and kaolin 600 mgm. Enterosan is planned to treat diarrhœa, colic and stomach upsets and in smaller doses to be effective in dealing with dyspepsias and "irritable tummies." Enterosan tablets are individually packed in metal-foil strips in packets of 16 tablets as a travel pack and in a dispensing pack of 500 tablets.

New Indigestion Remedy.—International Chemical Co., Ltd., 12 Chenies Street, London, W.C.1, announce the introduction of Milkote, a new indigestion remedy. Milkote tablets contain calcium carbonate and magnesium carbonate with the addition of valuable milk solids. A combination that is stated to have produced a unique remedy for indigestion and heartburn. When sucked in the mouth, the tablets are said to yield a constant drip-feed of milk solids and antacids, thus providing "gentle and prolonged relief." The product is being marketed at present in the Midland television area only.

COSMETICS AND TOILETRIES

New Pack Colour.—A new colour for the pack of Cidal, the beauty and deodorant soap containing hexachlorophene, is being introduced by J. Bibby & Sons Ltd., Liverpool. The circle and bar, part of the pack design, will, in future, be coloured yellow instead of pink. The intention is that the new design will suggest rather more strongly the pleasant lemon colour and fragrance of the soap. The pack for Cidal talcum powder will, however, retain the pink colouring "for feminine appeal."

Effervescent Foot Bath Tablets. — Carter Bros., Glen Laboratories, Shipley, Yorks, are packing Spato effervescent foot bath tablets in a modern designed carton holding ten tablets, each in a pre-moulded base of expanded polystyrene. Each tablet is inscribed "Spato" for easy identification, and contains methyl salicylate, volatile oil of mustard, benzoin, oil of rosemary, oil of thyme and oil of eucalyptus in an effervescent base. Show material is available.

SUNDRIES

Support Sock for Men. — Support socks for men which are knitted from elastic nylon thread and which are stated to be indistinguishable from ordinary socks are being manufactured by Lenton Products, Ltd., Grove Road, Lenton, Nottingham. Produced under the name of Yalcs, the socks are designed to reduce leg-fatigue. The socks are available in standard and large sizes.

In Two Colours.—Bikini is the style for the Celtex Slimline sanitary pantie. The pantie is made in soft rayon tricot with little bows of nylon ribbon on the hip. It is available in two colours, black with red bows and white with blue bows. There are hook attachments inside so that no sanitary belt is needed and the gusset is reinforced with waterproof plastic for perfect protection. Manufacturer is Southalls (Sales), Limited, Bessemer Road, Welwyn Garden City, Herts.

TRADE NOTES

Discontinued.—Fisons Pharmaceuticals, Ltd., Loughborough, Leics, announce they are no longer supplying Nomaze A.H. and Cavodil.

Exempted.—Horlicks, Ltd., Pharmaceutical Division, Slough, Bucks, announce that Calmitol, for use in the treatment of pruritus, is exempt from Schedule 4B restrictions.

Price Correction.—Johnson & Johnson (Gt. Britain), Ltd., Slough, Bucks, advise that the trade price of the bath size of Johnson's baby soap is 12s. 7d. and not as previously indicated.

Change of Name.—Jean Sorelle, Ltd., 21 Turle Road, London, N.4, announce that Promedico Products, Ltd., has been incorporated into Jean Sorelle, Ltd., and the company is now entitled Jean Sorelle, Ltd., Promedico division.

Display Prize Winners. — Nicholas Products, Bath Road, Slough, Bucks, have released the names of the £10 and £5 winners in the New Quick Kwells and Feminax display competition. The names are listed elsewhere in this issue.

New Streamlined Pack.—Morny, Ltd., 201 Regent Street, London, W.1, have produced a new slimline pack for their bath salts tablets. In white and gold, the carton has a cellophane window to display one wrapped tablet with the name of the fragrance. The tablet wrappers and Morny crest are colour co-ordinated with each of the company's eight fragrances.

Container Change.—G. T. Fulford Co. (U.K.), Ltd., Cornwall Road, Hatch End, Middlesex, have switched to a Quick tube pack for their Handjoy hand cleansing cream. Quick tube is based on the principle of dispensing products by means of a piston operating through a rigid tube as opposed to flattening a flexible tube by squeezing it. Handjoy is packaged in a 16 cc. high density pink polythene Quick tube, green silkscreen overprinted; cap, nozzle and piston are in white, low density polythene. Ageing and compatibility tests were carried out by PATRA.

Christmas Showrooms

THE following have been notified for July 5-8:—

GOYA, LTD., Rougemont Hotel, Exeter.

Bonus Offers

BAYER PRODUCTS CO., Winthrop House, Surbiton-upon-Thames, Surrey. Lenium. Fourteen invoiced as 12 on orders of 3 doz. or more 1½-oz. tubes, thirteen invoiced as twelve on orders of 1-3 doz. 1½-oz. tubes. Panadol 50, and Hayphryn thirteen invoiced as twelve, fourteen invoiced as twelve on orders of twenty-four or more.

CARTER BROS., Glen Laboratories, Shipley, Yorks. Spato effervescent foot bath tablets. 4 doz. invoiced as 3 doz.

CUSSONS SONS & CO., LTD., Kersal Vale, Manchester, 7. Imperial Leather soap. Additional 5 per cent. discount on all three sizes. Until August 13. Two tins of My Fair Lady talcum with every twelve tins of any Cussons talcum. Until August 16.

MAWS PHARMACY SUPPLIES, LTD., Aldersgate House, New Barnet, Herts. Maws baby powder. Extra 5 per cent. discount on both sizes. Until August 28. Baby pants 1s. 50 invoiced as 48.

Premium Offers

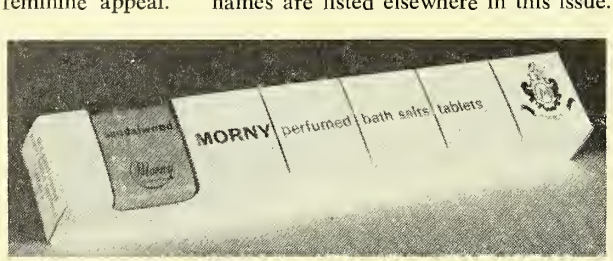
ALBERTO-CULVER, LTD., 44 Newington Causeway, London, S.E.1. VO5 giant size shampoo. Special summer price of 4s. 6d. (saving of 3s.).

ELIDA, LTD., 43 Portman Square, London, W.1. 22-carat gold-plated brooch for 7s. 11d. (saving of 13s. 1d.) to purchasers of three Sunsilk sachets or a bottle of Sunsilk. Until December 31.

FISONS FOODS, LTD., Loughborough, Leics. Sebbix medicated shampoo, 10d. off the family size, 6d. off the 3s. 3d. size. 12 packs invoiced as 11 to the retailer.

GIBBS PROPRIETARIES, LTD., Hesketh House, Portman Square, London, W.1. Set of six silver-plated Sheffield-made teaspoons for 4s. 6d. plus one New Signal carton. Until October 31.

KIMBERLEY-CLARK, LTD., Larkfield, Maidstone, Kent. Free handbag wallet for two towels with every pack of Kotex feminine towels.



New slimline pack for Morny bath salts tablets.

INFORMATION WANTED

The Editor would appreciate information about:

Penestas

Sol-Tan apparatus (manufacturers present address)

Non-Steroidal Anti-Inflammatory Agents

SYMPOSIUM IN EDINBURGH

A SYMPOSIUM on non-steroidal anti-inflammatory agents, organised by the fine chemicals group and Edinburgh section of the Society of Chemical Industry, was held in Edinburgh on May 29. It began with a review lecture by DR. J. J. R. DUTHIE (department of medicine, University of Edinburgh), who discussed the factors contributing to the clinical condition of inflammation. He emphasised that experimentally induced inflammation in many laboratory animals was not a strict parallel with the condition in the human subject and that currently used screening tests required revision. More extensive use of pigs and monkeys, which in certain respects were more like humans, was advocated. Dr. Duthie warned that suppression of inflammation by drugs might in some cases lead to far-reaching effects, since inflammation was merely a symptom of some underlying condition.

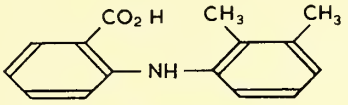
An "Arthritis" Test

DR. S. S. ADAMS (Boots Pure Drug Co., Ltd.), in a paper read in his absence by a colleague, agreed that new methods of testing were required and pointed out that in experimental animals there was no condition similar to arthritis. A "simulating arthritis" test was based on the injection of a killed bacterial suspension in mineral oil and examination of the subsequent lesions. Aspirin, phenylbutazone and paracetamol were drugs used for comparison.

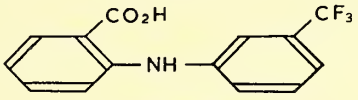
Observations on salicylates and allied compounds, discussed by DR. L. F. WIGGINS (Nicholas Research Institute), centered round the gastric irritation and blood loss caused by aspirin. To surmount that disadvantage salicylamide had been investigated and although its activity was less than that of aspirin, there was no gastric blood loss. It was contended that salicylic acid itself, or a salt, was safer in use than aspirin, in contradiction to the generally held belief.

Two other drugs based on the salicylates were discussed: Carsalam (1,3-benzoxazine-2,4-dione) which possesses good analgesic and antipyretic properties but only a small degree of anti-inflammatory activity, and aloxiprin (a polyoxoaluminium acetyl salicylate) which has been shown in clinical trials to be as effective as aspirin in the treatment of painful conditions (such as occur in rheumatism). It was maintained that that drug could be taken in higher dosage than could aspirin and over a longer period.

During the last few years reports had appeared concerning new drugs of potential value for the symptomatic treatment of rheumatoid arthritis and similar inflammatory infections of connective tissue. Notable among such drugs were the N-aryl anthranilic acid derivatives, mefenamic acid and flufenamic acid; the aryl acetic acids; indomethacin, and certain pyrazoles. Such drugs were discussed by DR. W. R. N. WILLIAMSON (Parke, Davis & Co.), who said that flufenamic acid had been favourably reported in a clinical trial on rheumatoid arthritis.

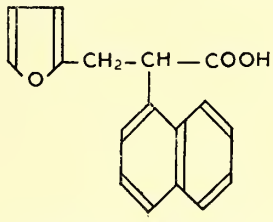


Mefanamic acid.



Flufenamic acid.

Some novel aryl acetic acid derivatives were described by DR. G. J. DURANT (Smith, Kline and French Laboratories, Ltd.). They had been investigated for anti-inflammatory activity as a result of the observation that α-(1-naphthyl)-2-furanpropionic acid had activity in the ultra-violet erythema test in guinea pigs.



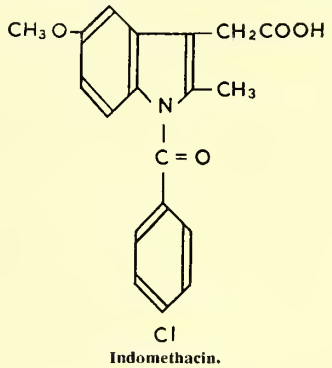
α-(1-naphthyl)-2-furanpropionic acid.

The anti-ultraviolet erythema activity of such 1-naphthalene acetic acid derivatives appeared of a similar order to the phenylacetic acid derivative ibufenac, and was also comparable with aspirin and mefenamic acid, but the order was lower than that of the 3-indole acetic acid derivative, indomethacin and also flufenamic acid and phenylbutazone.

Indomethacin

Actions of indomethacin (Indocid) were outlined by DR. C. A. WINTER (Merck, Sharp and Dohme Research Laboratories, United States). It had the ability to inhibit proliferation of connective tissue around a source of chronic irritation and to inhibit the development of œdema after injection of an irritant. It had proved extremely active in rats and more potent than any other known non-steroid anti-inflammatory compound, being even more potent than hydrocortisone in certain tests, though not so potent as dexamethasone. When administered together with a steroid, anti-inflammatory effects could be demonstrated at lower doses of steroid than would be required without indomethacin.

Metabolism of indomethacin varied greatly among different species of animals. In man the molecule seemed not to be broken down; the compound was excreted intact almost quantitatively in the urine, either in a free form or as the glucuronide conjugate. Conditions that had been treated with the drug included rheumatoid arthritis, spondylitis, degenerative joint disease, osteoarthritis, gout and tendinitis. In most studies, improvement had been reported in 60-80 per cent. or more of cases. Most commonly reported side effects were headache and gastrointestinal discomfort, each occurring in about 15 per



Indomethacin.

cent. of patients. Several investigators had reported an improvement in tolerance to the drug since the formulation had been changed from tablets to capsules and recently the use of suppositories appeared to have been successful in minimising side effects.

Anti-inflammatory Pyrazoles

Clinical applications of anti-inflammatory pyrazoles were discussed by DR. P. D. FOWLER (Geigy Pharmaceutical Co., Ltd.). They included rheumatoid arthritis, ophthalmology and dental surgery. Oxyphenbutazone (Tanderil), a metabolite of phenbutazone, showed a marked effect on tenderness and pain in early clinical trials in rheumatoid arthritis and had proved similar in effect to phenylbutazone itself. Inflammatory eye disease was a good test of anti-inflammatory effect and oxyphenbutazone had proved satisfactory in double-blind trials involving a placebo. Evidence was quoted to show that oxyphenbutazone compared favourably with prednisolone and the speaker considered the former to be superior in the long run. In dental surgery, post-operative swelling was best controlled by the use of oxyphenbutazone twenty-four hours pre-operatively. No serious toxicity had been reported in trials to date.

MR. W. HEPWORTH (Imperial Chemical Industries, Ltd.) described a new anti-inflammatory compound (I.C.I. 43823) which is a thiazolidone acetic acid derivative and is 2(*n*-butyloxycarbonylmethylene) thiazolid-4-one. That compound, he said, had been shown to prevent the development of secondary lesions in rats injected with Freund's adjuvant (a fine suspension of dead tubercle bacilli in liquid paraffin) into the footpad. That was in contrast to most other compounds currently used in the chemotherapy of rheumatoid arthritis in man, none of which interfered permanently with the disease process in the test animal. The compound

had been tested satisfactorily against controls and against phenylbutazone and it was considered that it might at least prevent further exacerbation of the arthritic condition. It was stated to be non-toxic by usual standards.

In summary, might be given the view of DR. C. A. WINTER, who held that anti-inflammatory agents had reached the limit of their field in the same way as had the anti-histaminics, in that treatment of symptoms could be controlled reasonably well. Now a different approach was required in order to control the underlying cause of which the symptoms were merely a manifestation.

After the conference, the seventh Lister memorial lecture, titled "Antibiotics in Perspective," was given by Professor E. B. Chain, F.R.S. (who was associated with the discovery and isolation of penicillin). The speaker reviewed the history of antisepsis and outlined in particular the early work on penicillin, the first paper on which had been published in 1940. The opening up of the antibiotic field had been entirely academic in origin, he said, but industry had taken up the challenge and there followed a period of systematic screening for antibiotics. To the industry's credit stood the introduction of chloramphenicol, the tetracyclines; polymyxin; novobiocin; cycloserin; kanamycin and griseofulvin. More recently, however, cephalosporin C stood to the credit of the academic sphere.

After penicillin had been launched, intensive research began in an effort to synthesise the molecule. It had been computed that the effort extended over five years involving 300 chemists and the expenditure of £7½ millions. Success in that synthesis would be a major advance but was as yet unattainable—in 1965 biosynthetic penicillins were still being made by fermentation.

As with any natural product, modification of the molucle was necessary and Professor Chain had advised the Beecham organisation not to screen for further antibiotics but to try a biochemical approach to the resolution of the penicillin problem of synthesis. The organisation had achieved the isolation of the nucleus of the penicillins, 6-aminopenicillanic acid, within six months. Arising out of that work it has been found possible to synthesise penicillinase resistant penicillins such as cloxacillin. Most penicillins were effective against Gram positive organisms but ampicillin had been introduced and was effective against Gram negative organisms.

In conclusion, Professor Chain said that with antibiotics practically the whole field of bacterial infections could now be dominated. Antibiotics were also proving valuable research tools in the elucidation of the structure of the bacterial cell wall, as inhibitors for the study of the respiratory chain, while some were of use in the study of protein synthesis.

MANUFACTURERS' ACTIVITIES

Tuberculosis Symposium. — Leading specialists from fourteen countries attended the fifth European symposium on genito-urinary tuberculosis, held in Scotland, June 14-18, under the sponsorship of Smith & Nephew Pharmaceuticals, Ltd., and Smith & Nephew Research, Ltd.

Antifreeze Corrosion Inhibitor System.—Borax Consolidated, Ltd., Borax House, Carlisle Place. London, S.W.1, claim to have successfully developed a method of formulating an antifreeze for the cooling systems of car engines using pentahydrate borax as the base. A bulletin detailing test results and methods of formulation is available free on request.

Scholarship Winners. — The Pfizer Group, Sandwich, Kent, announce that the winners of their university scholarships for 1965 are Carol M. Waller, formerly of Aston Woodhouse High School, and Keith Fuller, Chatham House Grammar School, Ramsgate. The scholarships, which are awarded annually, are tenable for four years and are worth up to £620 per annum.

Bangkok Factory Opened. — The Bangkok factory of Glaxo-Vidhyasom, Ltd., (a subsidiary of Glaxo Group, Ltd.), was officially opened on June 24 by Pote Sarasin (chairman of the Board of Investment, Thailand). Representing the group was Sir Harry Jephcott (president of the group), accompanied by Lady Jephcott. The factory will manufacture a wide range of pharmaceutical products.

French at Work.—Proprietary Perfumes, Ltd., Ashford, Kent, aware of the importance of French in the world's perfumery industry, has arranged for its staff to have lessons in that language on three nights a week on the premises. This is by arrangement with the Principal of Ashford Technical College. There are classes for beginners and for intermediate and advanced students. Sufficient numbers have indicated their interest to make it necessary to register the company's arrangements as an extension course of the Ashford Technical College.

To Exhibit in China.—Through consultation with the China Council for the Promotion of International Trade, Imperial Chemical Industries, Ltd., are to stage a major display of its products at Tientsin, October 5-16. The aim of the exhibition, which will cost about £60,000, will be to provide to the Chinese State Trading Corporations and to technical and commercial representatives of Chinese agricultural and industrial organisations full information about the range of I.C.I. products available to them. The company's pharmaceuticals division are to exhibit a range of their medical products.

Presentation.—At a private exhibition recently a presentation of a golden 12 Bore cartridge was made to designer, John Cresswell, and another to the team from Phillips, Scott and Turner Co., Laboratories, Newcastle on Tyne, headed by research director, Dr. J. R. Gwilt, for their work on the 12 Bore men's toiletry pack. The pack won the Supreme Golden Egg award and a Gold Star in the 1964 Starpacks competition. The idea was born in 1961, but it took three years of planning, researching and development to the final launch. In the planning stages John Cresswell came up with his brilliant concept of the 12 Bore pack—a manly pack combining a robust appearance and sales appeal. In the development stages it was found that the product was particularly difficult to pack because of the high alcohol and perfume content, consequently, special investigation had to be carried out into the use of plastics. In both the research and development stages, Dr. Gwilt ironed out what appeared to be unending problems. In its short life, 12 Bore has been quite successful. Although not originally planned to expand further than the home market, it has, now been put on the market, either nationally or in test, in at least six different countries, is under consideration in three others. It has been launched in Ireland, Sweden, Finland, Belgium, Holland and Australia, and is in regional test markets in other countries. In Finland it has become the No. 2 toiletry on the market.

Correspondence

Scottish Executive Election

SIR,—It was a great source of personal pleasure to find that despite territorial disadvantage, my name should appear in the upper half of the poll. Sincere thanks are due to my many colleagues and friends who had the confidence to return me to the Executive for a further period of three years. It will be my constant endeavour to justify the confidence during what will most certainly be an exciting and challenging period in the history of our profession

R. S. MORRISON,
Inverness

Rethinking

SIR,—It was an unexpected pleasure to see our business in the shopfitting display supplement (see *C. & D.*, June 26, p. 657). What does not seem to be appreciated is that shop alterations in themselves are not the whole answer, but the bringing into being a ruthless policy of rethinking. To get the best out of the job one has to be prepared to cut out lines. We now ask:—Does it pay? Does the time taken to sell it make it worth while financially? Can we turn it over in six weeks? Then, when these questions are answered, one has to train staff to sell and know the lines that do pay.

E. KNAPE,
Tavistock, Devon

Poser Solution

CORRECT interpretation of last week's poser is:—

Ungt. 1%
Hibitane
Mitte 50 gm. Sig.: M.d.u.

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A Deferment

RETAILERS are to be allowed a further year in which to dispose of certain pre-packed stocks that do not bear an indication of quantity on the container. That is the intention of a draft Weights and Measures (Exemption) Order 1965 laid before Parliament on June 24.

Provisions of the Weights and Measures Act 1963 coming into operation on July 31 require that on and after that date a wide range of pre-packed goods should bear an indication of quantity on their containers (*see C. & D. Diary and Year Book* 1965, *p.* 248). The goods are listed in various Schedules to the Act and many are sold in pharmacies but medicines and drugs are not included.

The new draft Order affects only those goods governed by the relevant provisions contained in Schedule 7 to the Act. That schedule includes such articles as lubricants, fertilisers, perfumery and toilet preparations, soap, ribbon, tape, sewing thread, pet foods, paint, cleaning powders, detergents, antifreeze, varnish, enamel, polishes, seeds, cigarettes, cigars and postal stationery.

If approved, the order will defer for twelve months —that is, until July 31, 1966, the operation of the requirement in the Act that the Schedule 7 goods must bear an indication of quantity. The exemption applies to "such goods which before July 31, 1965, ceased to be on the premises where they were pre-packed."

It will be noted that the proposed criteria is that the goods shall "cease to be on the premises where they were pre-packed." That phrase not only enables wholesalers to dispose of "unmarked" stocks they have received from a manufacturer before July 31, 1965, but also enables the manufacturer who has stock rooms in premises apart from his manufacturing units to send "unmarked" stock to the stock rooms until that date and then legally to supply the goods either to wholesalers or retailers.

A wholesaler who pre-packs goods in addition to his wholesaling activities, should note that circumstances might arise where he would be required to label goods that he is packing with a quantity declaration yet he could be supplying from his wholesale departments goods manufactured elsewhere that were not so labelled.

The much needed exemption will be welcomed by manufacturers, wholesalers and retailers. It has long been evident that there were practical difficulties in satisfying the original requirements. Almost continuously since the Act was approved, trade associations and individuals have appealed to the Board of Trade seeking an extension of the interim period beyond July 31. Until June 24, there was no official indication that the demands of the trade would be met. By its delay in making known the intention to issue the amending legislation, the Board of Trade has caused extreme difficulties—an unwarranted action by a Government department that is almost continuously exhorting industry to achieve higher levels of productivity and efficiency.

Some Steep Price Increases

ALTHOUGH the greater majority of pharmaceutical chemical prices during the first half of the year have shown no change from the levels of previous months, and even years, there have been notable exceptions. Because two metals—mercury and bismuth—have risen steeply, their values have been reflected in their respective salts.

Mercury started the year at the then record figure of £150 per flask of 72 lb. In a series of further advances from the end of January onwards, its value had uninterruptedly moved ahead to £265 by the end of June. To cite ammoniated mercury as an example of the effect that had on the salts, less than 50-kilo lots now cost 185s. per kilo, against 111s. 6d. at January 1. Stocks of mercury in all producing countries were reported to have dwindled and manufacturers lucky enough to have supplies, now have to guard them like gold bullion against raiders.

One reason given for the shortage was that more and more mercury was being required for (1) fungicides to meet the needs of developing countries pushing ahead to their agricultural plans and (2) more chlorine—caustic soda plants (which use mercury as a cathode) were being built to cater for the plastics industry.

So far Italy and Spain, the chief suppliers of mercury in the past, have been unable to cope with the added demand, and until more furnaces are installed they are unlikely to do so.

Bismuth metal rose from 17s. lb. to 22s. in March and to 28s. 6d. at the end of June. Apart from a one shilling per lb. increase about a year ago, there had been no change in its price for ten years. The sudden rise was attributed to a much tighter supply position caused through an increase in world demand. That position was brought about by the acrylic fibre industry which now uses bismuth as a catalyst. One previous supplier, Japan, has in consequence become an importer.

Quinine and quinidine must also be mentioned as showing phenomenal price gains during the first half of the year. Quinine sulphate in two stages moved up from 4s. 9½d. to 11s. per oz. during that time. Shortage of cinchona bark due to unrest in Congo and Indonesia was the sole reason for their rapid rise.

The disturbing feature in all the cases mentioned must be that no relief from the present situation can be expected in the foreseeable future.

ECHOES OF THE PAST

RECEPT FOR RUMISOM

From *Book of Memoranda* kept by a sexton at a cemetery around the year 1807.

2 ONCES gum guiacom, 1 once purified niter, put into one pint Good old Rum, well shuk to gather for some days. Take 2 Tea spoonsfull ever other night well mixt to gather with one Tea spoonsfull of Honney in a glass of water ever other night.

A Future for Professional Practice

Mr. A. E. Bailey, whose passing the "Chemist and Druggist" recorded with much regret last week, wrote this timely appraisal of pharmacy's dilemma just a short time before his death. He brought to it the experience of a life-time spent in the profession, but his solutions remain as forward-looking as those of any younger man.

A LEISURELY review of the contents of recent issues of THE CHEMIST AND DRUGGIST has thrown into prominence a number of important subjects for discussion, many of which would appear to affect materially those who follow the general practice of pharmacy. As examples of those controversial subjects I may instance the following:—Limitation and modernisation of pharmacies; definition and separation of foods and drugs; restriction of the sale of drugs and medicines to pharmacists; restriction on advertising of medical products; introduction of a five-day week; shortage of assistants entering retail practice; rural dispensing by medical practitioners; and improved methods of remuneration for pharmacists.

A super-pharmacist from the heights of Bloomsbury's Olympus might view each of the items in my list as a piece of a jigsaw puzzle and might be persuaded to devote the time and energy necessary for fitting them together to form a perfect whole. My poor effort is not the finished work of such a super-pharmacist however, it is simply the outcome of the experience I have acquired in the course of nearly sixty years on the Register.

Professional Practice

I shut my eyes for the moment to the various non-pharmaceutical activities of the pharmacist in general practice ("the retail") and I consider only the details of our professional calling, the work for which we were specially trained. Over the years we seem to have lost our "image" (if I may use the term), our conception of what the complete pharmacist should be. State legislation, community demands, social changes, have all exerted new pressures, set up new concepts, and widened the scope of our activities, until it is difficult to preserve our professional ambitions, so much are we hampered by our commercial commitments. Therefore, I think, our first essay in reorganisation should be to re-establish firmly the fact that we are engaged, first and foremost, in professional practice the preparation of medicines and medical products and their provision, along with medical appliances and sundries, to the members of our local community who need them. By the National Health Service Act the medical practitioner is appointed the guardian of the people's health and the pharmaceutical practitioner is recognised as the proper agent for the provision of all necessary medicines.

From the basic point, I suggest we should start afresh to examine our position. So far as existing conditions fit into the new picture they may be accepted modified as necessary. But from that basic point we require to plot a course through the problems and distractions that at present appear to hinder our attainment of a fully satisfying and rewarding professional career. (I repeat, that for the moment I am not concerned with the non-professional activities.)

Facts and Principles

I will endeavour, then, to set out some facts and principles that we must consider. The Ministry of Health is the central national authority, responsible for preserving the health of the people, and for providing medical and pharmaceutical services. Pharmaceutical chemists provide the pharmaceutical services and that service should be wholly professional so far as it concerns the Ministry of Health.

Originally, I think the National Health Insurance scheme provided for the building and equipment of local depôts—health centres—from which the medical and pharmaceutical services would be available. But doctors had local surgeries and chemists had local shops, so the Government made use of those instead of building new. Under the first N.H.I. Act, arrangements were completed with doctors and chemists for the medical and pharmaceutical services to be provided. The initial bargain made with chemists fixing the amount of their remuneration was not very satisfactory and negotiations have been built on the old basis ever since. For one thing, no adequate compensation was ever allowed for the use of existing premises as local depôts, so relieving the Government of the expense of building health centres.

The Ministry of Health made itself responsible for treating medically, when required, every member of the population. How surprising it was, then, that it should tolerate competition in that field. When medical services are to be provided free surely it was the Government's duty to discourage self-medication by every means in its power. I believe that there should now be a careful appraisal to differentiate between foods and allied products, and drugs, medicines and medical products. That division having been established, drastic restrictions should be laid on the handling of drugs and medicines. It is quite inconsistent for the Government to insist on the training and qualification of pharmacists and then allow such potent pharmaceutical products as aspirin to be freely distributed by grocers. What guarantee has the Government that self-medication does not ultimately throw an extra strain on the official health service and on official funds? Medical products, proprietary or otherwise, should not be advertised direct to the public, offering them every inducement to by-pass the official medical service. They should only be obtainable from depôts controlled by pharmacists, who are fully aware of the character and quality of the products they distribute.

Pharmacies as Ministry Depôts

Chemists, of course, have always engaged in a dual activity—professional practice, and commercial trading. There is no doubt that the content of non-pharmaceutical trading has expanded largely of late years. Whatever other commercial activities are carried on by the proprietor, his professional work, including that conducted in accordance with his contract with the Ministry of Health, should be carried on in a separate pharmaceutical department. Let us consider in detail some of the implications of this suggestion.

Immediately one thinks of two important current proposals: The limitation of the number of pharmacies and the modernsation and reconstruction of business premises.

It is not, I think, intended that the number of pharmacies should be restricted to what is necessary to provide focal points of distribution of professional pharmaceutical services as agents of the Ministry of Health. That would mean cutting out non-professional activities altogether. But a moderate reduction in the number of pharmacies could be well brought about with advantage leading to larger pharmacies being established, possibly under a joint partnership control. Modern reconstruction could be carried out with the object of creating quite separate commercial and pharmaceutical departments. As a result all available professional work would be channelled through fewer depôts. At present the proportion of such work dealt with in an average shop is estimated at one-third and it could easily rise to two-thirds with fewer depôts. The pharmacist would then do, *and would be seen to do,* the work he has been trained to do.

Pharmacists have for long claimed that the commercial side of their establishment has carried the pharmaceutical

side along. The non-pharmaceutical department that any chemist trader may choose to run, possibly with the help of so-called cosmetic girls, is the concern of no one but himself. He would not expect the Ministry of Health to contribute to its upkeep in case of poor trading, nor should he be called upon to share his commercial profits with the Ministry by subsidising the professional depôt.

More staff would be required if more professional work resulted from the limitation of pharmacies but more young pharmacists might be induced to enter general practice with an improvement in the professional atmosphere. In conjunction with the running of a separate non-pharmaceutical department, I am convinced that a five-day working week could be arranged for all members of the staff if required. Closing of the shop would not be necessary in all cases, for extended rota arrangements could be adopted.

Concerning dispensing in rural areas it should be possible to provide each area with its own pharmaceutical depôt which, if it could not be self-supporting, the Ministry of Health should be asked to subsidise. If it were impracticable to maintain a full-time pharmacy in a sparsely populated area, a group of pharmacists in a nearby town ought to be able to arrange to provide the necessary service in a jointly run depôt. The principle of dispensing by the pharmacist (instead of doctors in such areas) can only be upheld in certain cases by sacrifices by pharmaceutical contractors.

I have suggested complete separation between the non-pharmaceutical activities of the pharmacy and the professional service department, but there are several aspects of separation that must be faced. First, there are the provisions of the Pharmacy and Poisons Act. If a distinct line can be drawn between foods and drugs and reconstruction of premises can achieve the result desired, there should be no need for qualified supervision in the non-pharmaceutical department. In some instances it might even be possible for the pharmaceutical portion of the business to be so completely isolated that in cases of the proprietor's illness, or absence, there would be no possibility of poisons or products requiring qualified supervision being released. The second aspect of such specialisation in professionalism may not be so favourably received. If pharmacists are to conduct special professional pharmaceutical depôts as, amongst other duties, agents of the Ministry of Health, there should be fewer restrictions on the supply of medicinal preparations and the hours at which such supplies should be available to the public. The matter of removal of commercial restrictions is one which probably the Pharmaceutical Society could best take in hand in furtherance of its claim on behalf of all members that the practice of pharmacy is a professional service and not a trade activity.

A Planned Pharmaceutical Service

PHARMACY STAFFING AND THE MAN-POWER SITUATION

THE number of British graduates coming on to the Pharmaceutical Society's Register should reach 800 a year by 1970, not 650 as forecast by the man-power survey according to Dr. J. C. Parkinson (deputy secretary, Pharmaceutical Society). Dr. Parkinson who was speaking in Edinburgh to members of the Society resident in Scotland at their annual meeting on June 16, said there was a steady increase in the intake by schools which indicated that 900 entered this session and the intake may well be 1,000 in 1966. Assuming a success rate of 80 per cent. (the mean of the past five years) there should by 1982 be slightly more registered pharmacists than at present. But there would be an increased proportion of women pharmacists.

After referring to Dr. G. H. Macmorran's address on the distribution of pharmacies in Scotland (*C. & D.*, July 4, 1964, p. 4), Dr. Parkinson said that so far as England was concerned there was a fairly large area still open to development, by present standards. There were eleven counties in England having a higher population per pharmacy than Lanark and there were thirteen counties in Scotland having lower population per pharmacy than the lowest English county. Wales was similar to Scotland, although extremes were not so far apart.

Prescriptions

Some 228 million prescriptions were dispensed in 1964 by pharmacists and doctors in Great Britain. If they had all been dispensed in the 14,000 registered pharmacies, it would mean an average of about 16,000 per pharmacy a year—or 1,350 per month. The average for Scotland was 14,500 and there were eighteen counties dispensing substantially less than the national average—only two counties in Scotland had substantially more than the national average. To bring Scotland into line with the national average demanded a 10 per cent. reduction in the present register of premises (Wales apparently had a similar excess number of pharmacies *vis-a-vis* population but prescription statistics were slightly above average and so on that ground the distribution would seem to be equitable).

The 1961 Census of Retail Trade classified chemists, etc., showed that the turnover available to the average chemist was 20 per cent. greater than the average retailer in general. Classifying those figures, Scotland, London, North England and South England were areas in which the chemist was getting a below-average share of the business and in Wales, East and West Ridings, North Midland and South-west, the chemist was getting an above-average share of the business. Areas having low population/pharmacy ratios, low prescription potential and within regions having a low share of business were: Edinburgh, Aberdeenshire, Angus, Banff, Berwick, Bute, Kincardine, Kinross, Moray, Selkirk, Sutherland, Wigtown and London. Those were "the real danger areas—red on all counts." At the other extreme there were only four having high population/pharmacy ratios, etc.:—Derbyshire, Northants, Peterborough and Wiltshire.

It would appear that the requirements for opening a new pharmacy were to: (a) serve a population of at least 4,000; (b) be prepared to dispense 1,500—20,000 prescriptions a year; (c) expect to have a turnover of £20,000; and (d) be at such a distance from the nearest existing premises that there would not be a marked overlapping and consequent waste of man-power.

Many Below Necessary Turnover

Those figures were well above the turnovers of most pharmacies, in fact there were some 9,000 chemists, etc., below the £20,000 a year figure and 7,000 above; the main group being 4,000 pharmacies between £10,000 and £20,000. However, there appeared to be some 2,000 establishments having a turnover in excess of £1 million a year.

At present a considerable proportion of shops opening closed within three years—an unfortunate waste of time and money which must be avoided, but the majority of pharmacists involved in the premature closures remained at work in retail pharmacy.

Dr. Pickering suggested the following measures to encourage a more equitable distribution of pharmacies:

(1) Encourage amalgamation into groups in the urban areas — four medium sized well distributed pharmacies could give a more effective service than six or seven small businesses. The demand for a five-day week was going to make such groups attractive. (Edinburgh would appear to be ripe for such a development);

(2) prohibit the opening of new pharmacies in the red areas—unless there was a major shift in population, in which case presumably a shop would close and that there would virtually be a transfer of registration. That indicated that the system used for the transfer of licences by the licensing justices was one that might be studied;

(3) in the green areas the law of supply and demand could be expected to work and

(4) in the rest of the country the criteria of population and distance could be applied. It was possible that the Society might take powers to inhibit the registration of premises unless they were capable of giving a full service to a population of 4,000—i.e. the "gamblers" would be cut-out. There was the danger that only large companies could afford to open pharmacies of the size indicated unless a Pharmacy Finance Corporation was evolved. The N.P.U. (Holdings) venture gave an indication that money was available and

such a pharmacist-controlled body would seem to be feasible.

A large proportion of pharmacists in the higher age groups would be retiring in large numbers during the next ten years. He estimated that by 1982 40 per cent. of pharmacists would be women. It would become increasingly common to employ two women on a half-day basis to do the work now being done by one man, since a married woman, even when her family were growing-up rarely wished to work full-time. An important factor which must be taken into account was the five-day week. The new graduates in pharmacy, who in the future would all have a bachelor's degree after their names, "will have somewhat wider horizons than we had ourselves when we were qualified—which is no bad thing—and real efforts may be needed to keep them in our pharmaceutical ranks." There would need to be six to seven pharmacists to each group of five pharmacies or five full-time plus four part-time qualified staff. That was going to be expensive and so reinforced his argument for larger establishments.

The need of the pharmaceutical industry for qualified man-power was small and specialised. Industry would employ more pharmacists who had adequate specialised knowledge and the new special degrees in pharmacy would be producing such graduates. In the hospital field it remained to be seen whether the new salary scale offered an attractive career to young pharmacists.

The type of pharmaceutical training which was now developing was going to produce graduates with a broad scientific background which could be applied in many walks of life outside pharmacy. He believed that it was a good thing for the profession that such men and women would enter teaching, the food industry and other branches of applied science. Is it realistic to expect them to remain on the register? If so, by what means can we extend the activities of the Society to cater for their specialised interests?, he asked.

Discussion

MR. J. A. MYERS, Edinburgh, asked Dr. Parkinson if he thought that dispensing would continue at the same rate. In hospitals there was a tendency for prepacked drugs to be handed out at clinics. If that was developed on a large scale, would it not ultimately affect the volume of dispensing done at retail pharmacies? DR. PARKINSON said that practice varied in different parts of the country. The financial implications to the Health Service were difficult to determine. The patient's general practitioner might not be kept as well informed as he was at present.

MR. W. C. D. BAIN said he had heard of numerous proposals and plans in the past but he would like to see some positive action to improve the welfare and standing of pharmacists. THE PRESIDENT (Mr. J. C. Bloomfield) said that he thought definite proposals regarding limitation of pharmacies were nearer than ten years ago.

MR. F. MELROSE, Glenrothes, said that progress would be made if the Council's resolution was passed at the special meeting on July 25. MR. D. C. MAIR, Glasgow, asked if it would require legislation before the Society could prohibit the opening of new pharmacies. DR. PARKINSON said it was necessary. He felt that any decision regarding suitability of premises would need to be taken at local level. The standard of suitability would obviously be different for the centre of London from that in a rural area. MR. S. WOZNIAK, Dunfermline, asked if the expected increase in the proportion of women was a desirable development. Dr. Parkinson said he thought that women were very well suited for pharmacy. MR. J. MACLEAN, Auchinleck, asked if enough public relations work had been done so that M.P.'s were aware of the advantages of limitation of pharmacies. DR. PARKINSON said he felt it was much better to concentrate efforts when the proposals were coming before Parliament. That method had achieved a great deal in connection with resale price maintenance.

MR. J. B. GROSSET, Edinburgh, asked if young people would be attracted to the practice of pharmacy as set out in the motion before the special meeting. Were we destined to continue to run a mixed business?

DR. PARKINSON said that young people were attracted to it at present. In his experience of students, many left college intending to do anything but retail pharmacy, but, after a few years in industry or as a medical representative, they finished up in retail pharmacy.

MR. J. N. D. GRAY, Bridge of Allan, spoke of the exploitation of young pharmacists who lacked capital to finance their own businesses. He asked if there should not be a minimum proportion of shares owned by pharmacists before a company could operate. DR. PARKINSON said that the necessity of capital was another reason why pharmacy could not be entirely dissociated with commercial activities. Many people thought that all directors of a company engaging in pharmacy should be pharmacists, but that would also require legislation. DR. G. H. MACMORRAN, Edinburgh, said that in some areas, according to Dr. Parkinson's statistics, there were more than the average number of pharmacies in ratio to population and many of those were rural areas. "If we reduced the number of pharmacists, we would increase the number of dispensing doctors." DR. PARKINSON said that the problem of rural areas was difficult and he thought that a better start had been made to solve it in Scotland than had been done in England and Wales. Although local knowledge was needed, he thought that there must be some central control. MR. BAIN felt that the decision as to whether a pharmacy was necessary or not should be left to the local Pharmaceutical Committee. To MR. J. STEWART, Glasgow, DR. PARKINSON said that he could not see any way of getting action without parliamentary legislation. He felt a certain amount could be done within the present law by influencing the planners and organisers of new towns. Such people needed to be told of the part that the pharmacist played in the community.

BRANCH EVENTS

LIVERPOOL

Proposed Locum Register

COMPILATION of a register of pharmacists who are prepared to undertake short-term locums was suggested by MR. A. H. DYSON at the annual meeting of Liverpool Chemists' Association, and Branch of the Pharmaceutical Society recently. Mr. Dyson was asked to submit his scheme for consideration by the council of the Association.

Mr. Dyson said he had been concerned by the position of retail pharmacists in cases of illness, particularly those in business on their own account, and also of widows who might be left with a business. In Birkenhead recently four chemists who had been ill had returned to their businesses earlier than they ought to have done because of the difficulty of keeping them going. Birkenhead pharmacists, he said, were preparing a list of people who would be prepared to do short-term locums. The idea was that retired people who were available for locum work should be paid a small annual fee to reserve their services to chemists who contributed to a form of insurance scheme, said Mr. Dyson. They would, of course, be paid when required to do locum work.

MR. R. CLITHEROW (secretary) in his report said that over the past year or so there had been built up a high degree of co-operation with the branches at Birkenhead and Wallasey. The department of pharmacy of Liverpool College of Technology had been taken into the joint arrangements and it was hoped that that would result in post-graduate lectures with wider appeal.

Mr. Clitherow reviewed the year's activities and mentioned the success of Mrs. E. J. M. Leigh in obtaining a seat on the Council of the Society, and Mrs. D. H. Evans who had been elected chairman of the Liverpool Standing Conference of Women's Organisations. MR. J. C. LEIGH (treasurer), in presenting the accounts, reported that proceeds from the Benevolent Fund dance held in Liverpool had been made up to £225 by a donation from the Association and forwarded to the Fund. Appreciation was expressed to Mr. H. W. Cottle and the social committee for their efforts. MR. D. L. REES (retiring president) thanked Mr. Clitherow who, he said, had been responsible for cementing the friendship between the Merseyside branches, for his work. MRS. LEIGH drew attention to the Society's "Medicine with Care" travelling exhibition. Arrangements had been made for the exhibition to come to Liverpool, she said, and with the co-operation of the corporation and the director of education, it would be staged in the hall of the College of Technology.

N.H.S. STATISTICS

In LIVERPOOL during February 434,554 prescriptions (285,215 forms) were dispensed at a total cost of £193,125. The figures represent an increase of 19 per cent., 24 per cent. and 32 per cent. respectively over February 1964 figures.

THE DRUG WORLD IN AMERICA

Bulletin on events and trends in pharmacy, the industry and the administration

DR. RUDOLPH SEIDEN

A SURVEY conducted by the Sales Manpower Foundation of the Sales Executive Club, New York, shows that the average cost of selling $1 worth of pharmaceuticals is 30·5 cents. The cost of selling reported by chemical manufacturers is only 7·6 cents, while 14 cents is the average selling cost of the products reported by all 503 manufacturing and service companes. The figures include salesmen's compensation, their expenses, all sales management costs, advertising, merchandising and promotion expenses, servicing charges and miscellaneous. (D.N.W. 4-19). Of the total selling cost of pharmaceuticals, 37·3 per cent. is directly attributable to salesmen's compensation. Other findings were: Average cost to recruit and train a salesman, $7,612; average sales call costs, $9·00; salesmen's weekly expenses average, $61·55 or 36·1 per cent. of his weekly earnings. The 3,923 salesmen sold over $666,150,000 worth of pharmaceuticals during 1964 and calls per week 48·3.

Potassium Products Regulated

Coated potassium tablets have been ruled by the Food and Drug Administration to require submission of a New Drug Application (N.D.A.) before they can be continued to be marketed. Their labels will have to carry warnings and the prescription legend. Uncoated potassium tablets and liquid potassium preparations also are being placed on the prescription list and required to bear instructions concerning dilution before use, but do not need an N.D.A.

Meprobamate Dropped from U.S.P.

Meprobamate, one of the most widely used tranquillisers in the United States, does not appear in the new edition of the U.S. Pharmacopeia XVII, probably because of doubts about its therapeutic value. Also newer studies of patients on phenothiazine have indicated that dosage, duration of therapy, and exposure to light are important factors in determining the type and amount of any side effects. (C.E.N. 5-3.) The larger the dose and the longer the duration of therapy and the greater the exposure to light, the greater is the possibility of a side effect, such as opacity of the lens or lens and cornea (cataracts).

Photosensitivity Reactions

Photosensitivity reactions comprise an important group of clinical disorders and are being identified with increasing frequency, states the *Medical Letter* (7:10). The reactions occur on exposure to sunlight in such systemic disorders as porphyria, lupus erythematosus, and pellagra; in polymorphous light-sensitive eruption; while certain medicinals are being used; and after skin contact with certain plants and chemicals. Photosensitivity reactions are usually classified as phototoxic (an exaggerated sunburn with erythema and, in severe cases, blistering) or photoallergic (antigen-antibody reactions, which appear as sunburn or as urticarial, papular or eczematous lesions). Among drugs known to cause those reactions are the sulphonamides, the tetracyclines, griseofulvin, nalidixic acid, and some phenothiazines. Less frequently implicated drugs include the barbiturates, salicylates, estrogens, gold salts, quinine, and local anæsthetics of the procaine group. Methoxsalen and its congener, trimethylpsoralen, are administered orally to increase tolerance to sunlight and to encourage repigmentation in vitiligo. Initially, however, they may exert a photosensitising effect. Those drugs should not be used in women of childbearing age. Although chloroquine has been helpful in controlling polymorphous light-sensitivity and lupus reactions, it can itself cause photosensitisation.

An exaggerated sunburn response is occasionally noted following exposure of the skin to sunlight after topical applications of eau de Cologne or perfumes containing bergamot or citron oils.

Diphenylhydantoin, first used in 1938 as an epilepsy treatment, has now been found useful in the treatment of seriously abnormal heart beats by Dr. H. Bernstein and others of the University of California. The investigators believe that the drug acts directly on the heart muscle, possibly by shifting intra- and extra-cellular sodium and potassium levels, making the tissue more resistant to abnormal electrical activity.

New Drugs

The following are being tested:

2-(0-Chloro-phenyl)-2-methyl-amino-cyclohexanone, an injectable short-acting general anæsthetic possessing also powerful analgesic action. A dose of 1 mgm. per kilo body weight produces analgesia and coma in thirty seconds. Recovery from analgesia and anæsthesia usually occurs within ten minutes and complete normality within one to two hours. (Parke, Davis.)

CI-581 is a fast-acting phencyclidine derivative. It produced both profound analgesia and surgical anæsthesia within thirty seconds in adults when given intravenously. Given intramuscularly in children it produces surgical anæsthesia within five minutes, lasting from five to twenty minutes, depending on the dose given. (Parke, Davis.)

DESELEX is produced by reacting Renacidin (a powder composed of lactones, anhydrides, salts and esters of gluconic, malic, and citric acids) with ethylene diamine tetra-acetic acid in the presence of a catalyst. This complex possesses strong sequestering, chelating and decalcifying properties. It is being tested as urinary calculus solvent. (Guardian Che.).

DICHLORMETHOTREXATE is 3′,5′-dichloromethotrexate. It is found to be superior to methotrexate in inhibiting the L 1210 leukæmia and C3H lymphosarcoma when given orally: 10 per cent. of the patients treated show complete tumour suppression and over 20 per cent. show partial tumour suppression, but only for short periods. (Lederle.)

FLUPHENAZINE enanthate successfully used parenterally and orally in the treatment of psychotic patients. (Squbb.)

MEBENAZINE is a monamine oxidase inhibitor which excrts a hypoglycemic effect in diabetes when given alone or in combination with sulphonylurea or insulin. (Upjohn.)

METHALONE, a testosterone derivative and anabolic steroid. Given orally it lowered hypercholesterolemia in 13 out of 15 patients. (Synthex.)

NATULAN is 1-methyl-2-p-(isopropylcarbamoyl)-benzylhydrazine hydrochloride. It is useful in the palliative treatment of the late stages of Hodgkin's disease. Remission is possible, particularly in those cases refractory to the alkylating agents. Side effects are nausea and leucopenia; two (out of forty) patients developed a rash and one had a slight outfall of hair. (La Roche.)

TRISORALEN, or trimethylpsoralen, is used orally to increase tolerance to sunlight and enhance pigmentation. (Elder.)

U-11100A is 1-(2-(p-3,4-dihydro-6-methoxy-2-phenyl-1-naphthyl) - phen - oxy-ethyl)-pyrrolidine hydrochloride, a new contraceptive which is believed to interrupt pregnancy by (1) disruption of egg transport and (2) impairment of the decidual reaction. (Upjohn.)

UROKINASE is a clot-dissolving enzyme extracted from human urine. It converts plasminogen into plasmin, which in turn liquifies the fibrin inside a blood clot, causing it to dissolve. It will be tested in patients with blood clots affecting the heart, brain, lungs and extremities. It takes 2,400 quarts of urine to produce only one-thousandth of an ounce of crystalline Urokinase. (Winthrop.)

OVERSEAS NEWS

DENMARK

Preliminary Injunction

A PRELIMINARY injunction against the (Danish) Dumex Co., involving the the broad spectrum antibiotic oxytetracycline, was granted recently to Chas. Pfizer & Co., Inc., United States of America, by the city court of Copenhagen, Denmark. The injunction prohibits the further production and sale of oxytetracycline by the Danish company pending final decision in a patent infringement suit brought by Messrs. Pfizer.

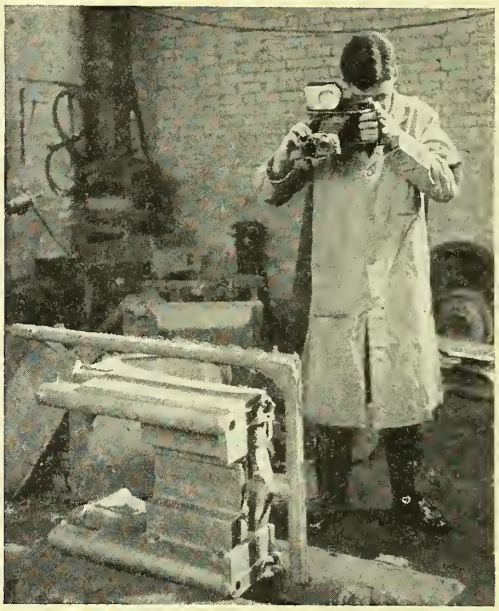
ITALY

Pharmaceutical Industry Reprieve

THE suspension of parliamentary examination of a Communist Bill providing for nationalisation of the Italian pharmaceutical industry has been approved by a majority of the industry and health commissions of the Senate. The Bill provided for creation of a public body entrusted with control of pharmaceutical production and sales.

Speeding up Production with "Instant" Pictures

A SYSTEM THAT OFFERS A NEW FACILITY TO INDUSTRIALISTS



Intricate castings need intricate "runner" systems through which to feed the molten metal into the mould. Founders S. Russell & Sons, Ltd., Leicester, use the Polaroid camera to record such castings and their "runners" — making it a simple reference job to repeat the casting order at a later date.

THROUGHOUT the world today business, industry and science are advancing at a faster and faster tempo. The pressure of development, and the implementation of new techniques in all spheres of production, research, marketing, sales and service, are forcing managers and staffs at all levels to demand quicker and more easily understood communications systems. Computers, for example, have developed from their early complexity to a stage at which operators have only a few series of buttons to press, and the machine's internal programme systems are so sophisticated that it becomes possible to instruct the machines with simple written or even verbal orders.

Impact of Pictures

In pace with all those developments in communications systems is striding the prime mover in thousands of visual communications systems—photography. Ever since primitive man drew pictures on the walls of his cave, a picture has been one of the most easily understood communications aids. The advent of photography made the picture a much more precise tool, and one which rapidly became of tremendous importance throughout commerce and industry. One has only to look at the amply illustrated text-books and instructions manuals supplied with such simple (?) equipment as typewriters or cameras to realise how heavily sales executives rely on photographs to get a message across to users.

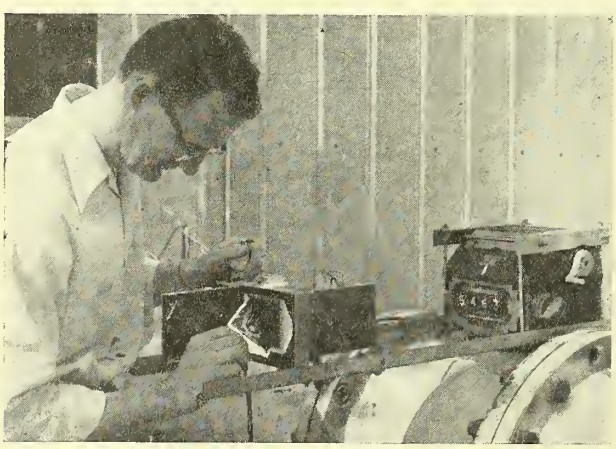
One has, too, only to look in on television—pictures, after all, and incidentally, perhaps, too great a proportion of them filmed rather than "live"—to understand how great is the impact of pictures.

One of the most fascinating developments of photography was made in America in 1947, when Dr. Edwin Land and the Polaroid Corporation introduced the first Polaroid Land camera, and made possible the production of finished pictures in a matter of seconds. Aside from the technical achievement and the resounding impact it made throughout the world upon all types of photographers ranging from the professional to the holiday snapshotter, perhaps the biggest impact came when the business man, the industrialist, and the scientist realised the everyday value of "instant" pictures.

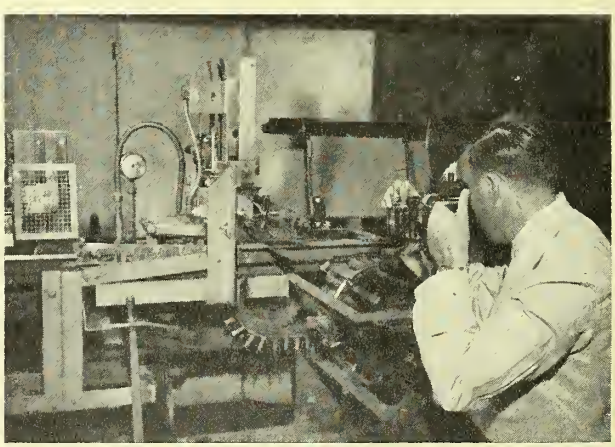
Here, at last, was a system that could sometimes eliminate and would nearly always substantially reduce three costly items in an organisation's communications budget — time, space, and experience. It became possible to get a photograph within seconds of realising the advantage of having one.

Looking for a moment at the Polaroid Land system of photography *vis-à-vis* conventional photography under those headings of time, space, experience, one finds the following advantages.

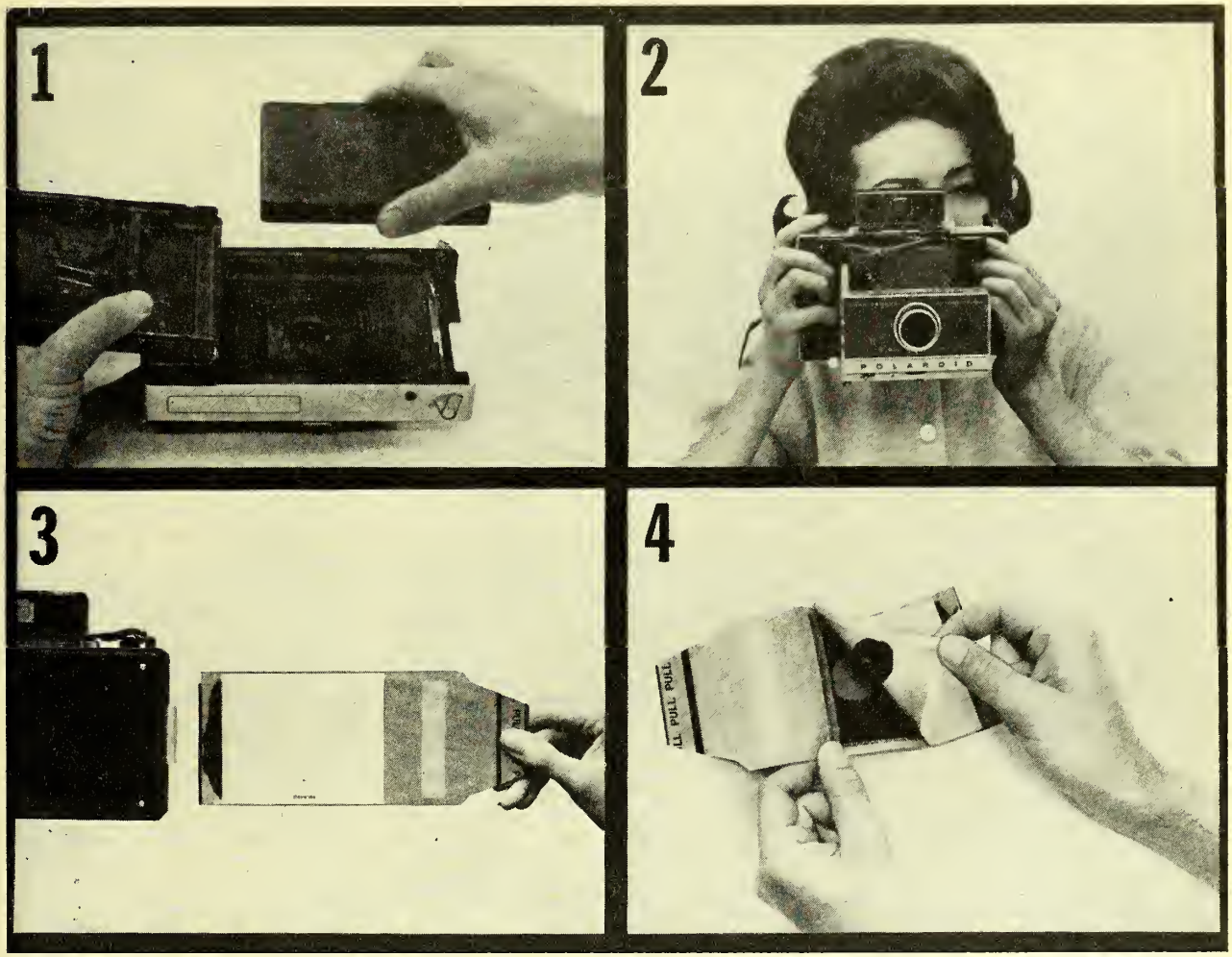
TIME: First, having a picture in seconds cuts out the matter of hours that may have to be taken up in developing and printing processes. Some national newspapers—by almost superhuman efficiency—can produce conventional photographs in about five minutes, but that is not the usual situation found in industry or business. It certainly is not the situation for the amateur photographer, of course, who either spends several hours in his darkroom pursuing a passionate hobby, or waits several days for a processing house to return his holiday snapshots to the local chemist. Faced with such time-lags, the industrialist naturally thinks of the man-hours involved and how much a project may be delayed



Laboratory testing of high-pressure vacuum systems needed a complete series of digital records to be made—the Polaroid camera provided the perfect answer.



Damaged components of a machine on a vital production line are quickly photographed with the Polaroid Land camera to help design teams in checking necessary modifications.



Instant picture-taking is simplicity itself with the Polaroid Automatic 100 Land camera. In this four-step photograph (1) the film pack is loaded—its an eight-exposure pack that drops straight into place in the camera. (2) Once loaded and a check made on film speed and shooting conditions, it is simply a matter of focus and shoot. (3) Immediately after the picture is taken the tab is pulled and out comes the complete picture assembly; after a wait for development time (10 sec. for black-and-white, between 65 and 90 sec. for colour). (4) The assembly is simply stripped apart to reveal the finished picture.

because his photographs are not yet available. While the amateur photographer can look at his hobby and consider cost of materials and processing alone, the businessman must also build into his budget the cost of those man-hours, either in processing or in the hold-up of his own projects.

Developments in Films

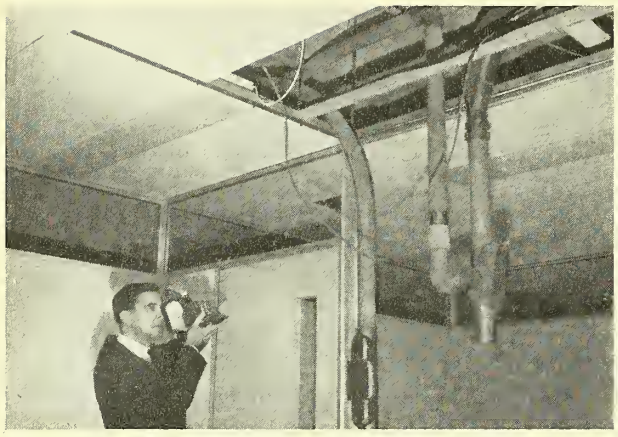
From the time aspect, Polaroid Land pictures have a distinct advantage. When the first Land camera came on to the market in 1948 it produced a sepia-toned picture in sixty seconds. Though that was itself unbeatable, the intensive research and development programme that continued at Polaroid Corporation laboratories in Cambridge, Massachusetts, made a black-and-white picture and then cut the development time to ten seconds. After an eight-year research programme, a colour film was introduced in 1963 that gives full colour pictures in one minute.

During the eighteen years in which instant pictures have been on the market, many different types of film have been introduced. The black-and-white and colour films are available in different formats for use with two sizes of Polaroid Land camera and for professional 4 x 5-in. cameras. There are films producing monochrome transparencies for "instant" projection and multiple reproduction in copying systems, film for infra-red pictures, film for *x*-ray pictures, film producing high-quality negatives in twenty seconds.

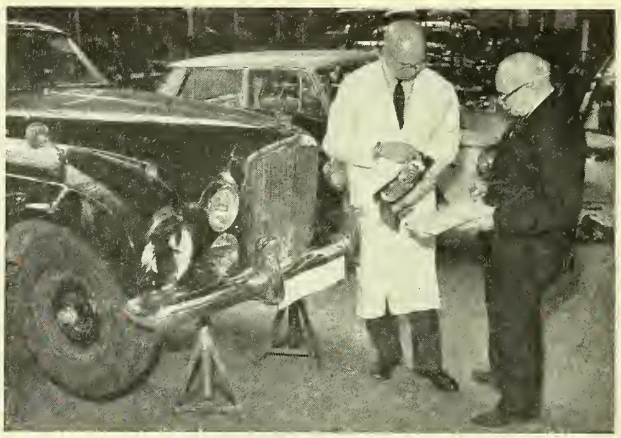
SPACE: In some circumstances the industrialist may decide to avoid the delay of having his photographs produced externally. He engages his own photographic staff and builds a darkroom. While that can be more economic, particularly where the volume of photographic assignments is high, he still has to consider the cost of man-hours and must in fact add to it the cost of space taken up by the darkroom on the premises. The Polaroid Land camera has its own "darkroom." The roll or pack of film contains all the necessary ingredients to produce the finished pictures—negative, positive, and developer reagent.

SKILL: There are many occasions on which the business photograph does not require the experience of a highly skilled photographer. His knowledge of correct lighting conditions, of film, and of camera angles, exposures and shutter speeds is invaluable if artistic or precise projects are envisaged, but sometimes all that is required is a simple snapshot of the subject matter. Yet it is strange but true that many capable amateurs, faced with a business assignment, suddenly seem to have five thumbs on each hand! Not until the finished pictures are returned from the processors does one find out that they are under-exposed, out-of-focus, or show the wrong subject matter from an unflattering angle!

One of the design concepts that has been rigidly adhered to in the development of all the Polaroid cameras has been that the apparatus must be simple to operate. The built-in simplicity and the advantage of being able to see a mistake within a matter of seconds, and if necessary shoot another picture without delay, makes it an ideal tool for the non-photographic businessman or scientist who nevertheless needs photographs.



Heating and ventilating engineers, architects and office planners use Polaroid Land "instant pictures" to record special features that have to be taken into account in making alterations to existing premises.



Garages use the Polaroid Land camera to take record pictures of damaged cars for their own records, for insurance company assessors and for owners.

The concept of simplicity is perhaps best illustrated in the Automatic 100 Land camera. In addition to taking an eight-exposure film-pack, which can be loaded in seven seconds and just drops into place through a hinged camera back, the camera has an electric eye and an electronic shutter to control exposure automatically.

Whether the light is that of a single candle or a flash-bulb, no calculations or special procedures are needed. Operation of the camera, once it is loaded and a quick check has been made on the film speed and lighting controls, is reduced to four straightforward steps—focus, expose, cock the shutter (for the next picture), and pull the tab. On the camera, the four steps are actually marked 1, 2, 3 and 4. That ultra-simple routine means that even the office boy may be taught to take an adequate photograph in a matter of minutes.

Applications

How is the system put to work? Applications are legion, and it is difficult to select just one. Instead let us look at the birth of a hypothetical pharmaceutical product and see where the instant pictures may well be used.

IN THE RESEARCH LABORATORY, the scientist watches in his microscope the growth of a new crystalline substance. He attaches the Land camera to the microscope and takes a photograph for his records and reports, and to illustrate a technical paper he is writing for a magazine. The new substance undergoes further tests for stability, resistance to other substances and various phenomena. Some of the test results are displayed on oscilloscopes, and the Land camera used to record the traces on the screen. Other tests involve reaction to heat, so infra-red photographs are immediately taken.

INTO PRODUCTION, the product needs new handling machinery. Ten-second pictures are taken of existing machines, and modifications sketched in on the prints to instruct the drawing office on which designs to alter. Existing plant layout is recorded to give the management information on where to locate the new machines. Handling techniques must be precise, so a series of photographs are taken showing exactly how it is done. The pictures go to the technical writers to illustrate instruction and service manuals. At the same time transparencies are taken and immediately produced as slides for use by the education officer in training machine operators.

The product, when packed, is not easily accessible, so ten-second *x*-ray pictures are taken on a batch basis to ensure that packing is sound, and the product safe within.

Aid to Promotion

The packaging design team have already been using the camera to record various prototype packs before making their decision. Extra pictures go through to the advertising agents, paper suppliers and printers to let them know what will be required. The advertising agent starts to prepare the promotion campaign, shooting a series of pictures for incorporation in a campaign presentation folder and for later instruction to the professional photographer who will "shoot" the finished artwork for the newspaper advertisements. The photographer himself uses a ten-second picture to check the exposure and lighting needed in his studio.

ON TO SALES—the manager has to let his area representatives know as quickly as possible what the new product looks like—he shoots "instant" pictures and puts them straight in the post to his team. An important customer wants to know quickly what sales aids are to be made for the new product. Pictures are taken of designs on the drawing board and rushed round by messenger the same afternoon.

The publicity manager hears of a "very famous person" using the new product. He goes out with the Land camera, takes pictures and has them ready to go out with his press release that evening. He has also taken pictures of the new production line for the company's house magazine.

In the middle of the rush a machine breaks down. A small but vital part is needed from a subcontractor, but no one can find a record of the part number. A photograph of the broken part is taken and sent round to the subcontractor to identify. The new part comes by return. Again in the rush, an accident occurs and an employee is injured. Photographs are taken by the safety officer. Copies of the print help the hospital staff to realise what happened. Further copies tell the insurance company what has occurred. Another copy goes to the factory inspector with a report. Transparencies are made for further employee training sessions.

Meanwhile complaints have been coming in about damaged shipments. Pictures are therefore taken of packing bays and packed units for dispatch with customer's delivery notes to ensure that everything was satisfactory on leaving the factory.

And at the weekend . . . the managing director commandeers the camera to take home and shoot pictures of his wife and family on a picnic!

That may have been hypothetical, yet the situations in which the camera and a picture at speed can be of tremendous help, if not sometimes vital, are entirely real. They and many other situations occur in one form or another throughout business, industry, government, science, education and leisure—all around the world, thousands of times every day. They account for the growth of the instant-picture system to its present levels, at which over 7,000,000 Polaroid Land cameras are in use. They will account for the expansion of instant picture-taking in the future, and provide profitable opportunities for the dealer.

PHOTOGRAPHIC NOTES

A New Range Stocked.—H. B. Dorling, Ltd., photographic division, Selinas Lane, Dagenham, Essex, announce that they are now wholesale stockists of Ilford, Ltd., films, cameras, projectors and accessories for distribution to registered pharmacies only.

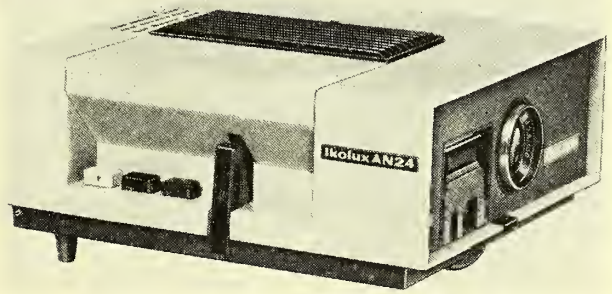
Free Insurance. — Pullin Photographic, Ltd., 11 Aintree Road, Perivale, Greenford, Middlesex, are offering a free twelve months' guarantee against loss or damage to all purchasers of Olympus, Nikon, Nikkorex, Konica and Bauer cameras during period to August 31.

Reversal Roll Film for Professionals. —Agfa, Ltd., 27 Regent Street, London, S.W.1, are introducing a reversal roll film in 120 size for professional users. To be supplied in daylight type (CT-P) with nominal speed 50 ASA and artificial light type (CK-P) nominally 80 ASA each batch will be tested individually and recommended effective speed, stated.

Finisher Extends Delivery Service.—Photo Laboratories (London), Ltd., Tay Building, Kensal Rise, London, N.W.10, have extended their van delivery service in the Home Counties. The area covered now reaches to Luton and Leighton Buzzard, Beds; Slough and Amersham, Bucks; Leatherhead and Croydon, Surrey; Loughton, Essex; and Berkhamsted and Welwyn Garden City, Herts.

Gadget Bags.—Paul Plus, Ltd., 29 King Street, Newcastle, Staffs, offer a series of Royalite outfit cases to suit the needs of the individual purchaser and his equipment. In three sizes, uniform in style and design the cases are made from a tough polymer material and are claimed to be moisture and heat-proof. They are strengthened with aluminium rims around body and lid. Locking catches and carrying handles and/or sling straps are provided. Finish is dark grey. The cases are filled with foam plastic that can be cut to form "nests" for the various items of equipment, a cutting knife being provided with each case. A modified version of each size of case is available, in which there is already a pre-cut hollow for a single lens reflex of average size, and two rectangular cut-outs to hold accessories. A cutting knife is provided and the price is the same as for the uncut type.

Automatic Projector. — The Ikolux AN 24 slide projector made by Zeiss Ikon, A.G., Stuttgart, Western Germany, has remote controls for forward and reverse slide transport, and for focusing. "Semi-automatic" operation is also possible, the slide carrier being moved by hand. The magazine can be set at any desired slide number. The magazine housing folds up to the side and without the magazine in place the slide carrier can be moved into the light beam. A feature of this projector is the low current-drain circuit, which is of great advantage when projection intervals are short, and is claimed to more than double the service life of the low-voltage lamp (24 v.) A small projection screen is mounted inside the lid of the carrying case so that slides may be shown without darkening the room. A connector is provided for conventional sound tape control equipment. A choice of three lenses is available: the 85-mm. f/2·9 Ikotar, 100-mm. f/2·8 Ikotar or the 125-mm. f/3 Ikotar. The projector is marketed by Degenhardt & Co., Ltd., 20 Mortimer Street, London, W.1.

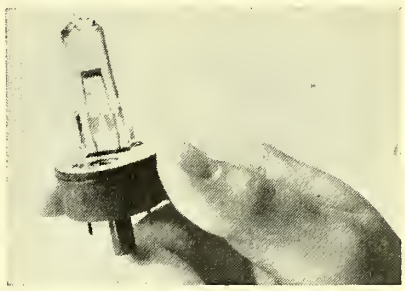


ECONOMICAL: The low current-drain circuit built in to the Ikolux AN24 slide projector marketed by Degenhardt & Co., Ltd., 20 Mortimer Street, London, W.1, is claimed to more than double the life of the lamp.

Non-scratch Packaging. — Templecolor Laboratories, Ltd., 131 Duckmoor Road, Ashton Gate, Bristol, 3, have recently introduced a newly designed Temple-pack presentation for processed 35-mm. negatives. Film is dealt with in uncut lengths and Cellophane strip has been introduced in place of paper as a scratch-proof lining. Both the bobbin and carton are presented in two colours in a modern design. As an introductory offer to new users the company is supplying samples of 100 at half-price until July 30.

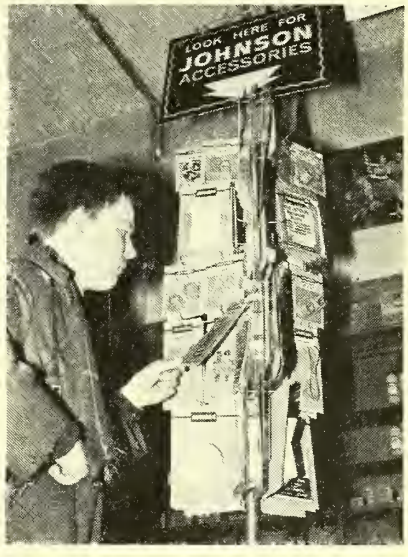
Scholarships to Cease.—Kodak, Ltd., Kodak House, Kingsway, London, W.C.2, announce that their annual Scholarships in Colour Photography and Scholarships in Advanced Photography, introduced in 1959, have fulfilled their original purpose and the company does not propose to continue the scholarships in their present form after the termination of the 1965 awards. Messrs. Kodak are considering their replacement by other schemes which they feel will be of benefit to the art and practice of photography.

Tungsten - Quartz Illumination. — Owners of Paximat low-voltage projectors may now convert their machines for tungsten-quartz illumination by means of a plug-in lamp adapter. Two adapters have been introduced—one (illustrated) for the N24 de-luxe projector and designed to accept the A1/216 tungsten-quartz lamp, and the other for the N12 electric and Triumph N12 models, enabling them to use the A1/215 lamp. In tests conducted with the Paximat range tungsten-quartz lamps were run to destruction and claimed to have achieved burning



times well in excess of the lamp manufacturer's specified minimum and the slide gate apertures to have remained at temperatures within the tolerances demanded by the projector manufacturer. Both adapters, distributed in the United Kingdom by Rank Photographic, Photographic House, Aintree Road, Perivale, Middlesex, are now becoming available. Price of adapter for N24 projector is 14s. 3d., and for the N12 machines 11s. 9d.

"Dispenser" for Photographic Aids. —Johnsons of Hendon, Ltd., Hendon Way, London, N.W.4, have introduced a self-service sales aid in the form of an adjustable metal pole suitable for use in shops with a floor-to-ceiling height of 10 ft. 3 in. to 13 ft., the



pole takes up only 2 in. of floor space and supports a rotating framework fitted with forty-eight hooks to accept Johnsons' skin-packed accessories. An order from a list of forty-two items in quantities specified by the company to a current net value of £27 13s. 7d. qualifies for a free loan of the dispenser pole. The goods are presented on cards with a clear skin cover and in future are being supplied only in that pack, whether required for the "dispenser" or not. New lines included in the "dispenser" starter pack comprise a flat 6 in. squeegee; gate cleaning brush; Selvyt polishing cloths (packed in pairs); shoulder pads and tilting Letraset. The pole is not available through wholesalers.

TRADE REPORT

The prices given are those obtained by importers, or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JUNE 30: Inquiry for CRUDE DRUGS was scant and price changes were confined to a handful of commodities.

A parcel of CANADA BALSAM was being offered at 24s. per lb. CAMPHOR POWDER was lower by sixpence per lb. High-testing IPECACUANHA continued short on the spot, while prices for shipment from various sources were hardly changed. A few AROMATIC SEEDS were dearer including CUMIN and Indian FENNEL; TURMERIC continued to decline.

In ESSENTIAL OILS forward offers of Far-Eastern CITRONELLA were slightly firmer and Brazilian PEPPERMINT for shipment was up three-halfpence per lb. Mysore SANDALWOOD was again quoted on the spot after a short absence.

As previously forecast, the prices for BISMUTH SALTS have now advanced to take account of the higher metal price which has gone up by 6s. 6d. per lb. The schedules given below show that the CARBONATE has gone up by 15s. per kilo and the SUBNITRATE by 14s.

Pharmaceutical Chemicals

Prices below may be subject to temporary import surcharge

ALOIN. — Micro-crystalline, 14-lb. lots, 34s. per lb.

AMINACRINE. — HYDROCHLORIDE, B.P., is £24 per kilo.

AMMONIUM ACETATE. — Kegs (70-kilos), B.P.C. 1949, 8s. 1d. per kilo. SOLUTION, strong, 3s. 6d. kilo.

AMMONIUM BICARBONATE.—B.P. powder £54 10s. per ton; CARBONATE, £83 10s. for lump and £87 10s. for powder. All in 1-cwt. free kegs.

AMMONIUM CHLORIDE.—50-kilo lots pure powder, 2s. 1d. per kilo.

AMMONIUM NITRATE.—Crystals, 1s. 8d. per kilo in 50-kilo lots.

AMMONIUM SULPHATE.—50-kilo lots, 2s. per kilo for B.P.C. 1934 grade.

BARIUM SULPHATE. — B.P., 50-kilo lots, 3s. 8d. to 3s. 9½d. as to package; 250-kilos from 3s. 3½d. to 3s. 5d.

BISMUTH SALTS.—Advanced. Prices (per kilo) are now:

Quantity	Under 50		50		250	
	s.	d.	s.	d.	s.	d.
CARBONATE ...	77	10	76	0	75	0
SALICYLATE ...	72	4	70	6	—	
SUBGALLATE ...	67	10	66	0	—	
SUBNITRATE ...	71	10	70	0	69	0

LONDON EXCHANGE RATES

At the opening on Tuesday

Amsterdam	Florins to £	10·05¼–10·06
Bombay	Shillings to rupee	1/5 15/16–1/6 1/16
Brussels	Francs to £	138·52½–138·57½
Copenhagen	Kronor to £	19·34 5/8–19·34 7/8
Frankfurt	D. Marks to £	11·17½–11·17¾
Hong Kong	Shillings to $	1/2 7/8–1/3
Karachi	Shillings to rupee	1/5 15/16–1/6 1/16
Lisbon	Escudos to £	80·15–80·30
Malaya	Shillings to $	2·3 13/16–2·4 1/16
Milan	Lira to £	1,743½–1,744½
Montreal	Dollars to £	3·02 15/16–3·02 15/16
*New York	Dollars to £	2·78 7/8–2·82
Oslo	Kronor to £	19·97–19·97½
Paris	Francs to £	13·67 7/8–13·68¼
Stockholm	Kronor to £	14·43¾–14·43¾
Zurich	Francs to £	12·10¼–12·10⅜

*Bank of England official limits. Bank rate: 6 per cent. from June 3.

CALAMINE.—Five-cwt. lots, 1s, 11d. per lb.; 1-ton, 1s. 9½d.

CALCIUM CARBONATE.—B.P. light precipitated powder, 1-ton lots, £37 10s. per ton in free bags, ex works.

CALCIUM CHLORIDE.—Fused, 3s. 11d. per kilo. In 12½-kilo tin for 100-kilos.

CALCIUM GLUCONATE. — 10s. 6d. to 12s. per lb., as to quantity.

CALCIUM PANTOTHENATE. — 97s. 6d. per kilo.

CALCIUM PHOSPHATE.—B.P.C. is 1s. 5d. per lb. for 1-cwt. lots and 1s. 4d. for 5-cwt.

HEXAMINE MANDELATE. — 50 kilo lots,

HYDROGEN PEROXIDE.—For 27·5 per cent. by weight, £115 per ton; 35 per cent., £138.

POTASH SULPHURATED. — Lump, B.P.C. 1959, 6s. 11d. per kilo in 50-kilo drums.

POTASSIUM ACETATE. — (Per lb.) 1-cwt. lots, 3s.; 5-cwt., 2s. 8d.; 10-cwt., 2s. 6d.

POTASSIUM BICARBONATE.—B.P. powder, 110s. per cwt. 1–4-cwt. lots and 105s. per cwt. for 5-cwt. and over.

POTASSIUM BROMATE. — In 5-cwt. lots, 5s. 3d. per lb.

POTASSIUM CARBONATE. — 50-kilo kegs, 5s. 1d. per kilo.

POTASSIUM CHLORATE. — 50-kilo cases, 5s. 6d. per kilo.

POTASSIUM CHLORIDE. — Pure. 50-kilo sacks, 3s. 4d. per kilo.

POTASSIUM HYDROXIDE. — Pellets, B.P., 8s 9½d. per kilo; sticks, 13s.; technical flake, 4s. All 50-kilo lots.

POTASSIUM 8-HYDROXYQUINOLINE SULPHATE.—1-kilo is 55s. per kilo.

POTASSIUM METABISULPHITE. — Crystals, 50-kilo kegs, 3s. 4d. per kilo.

POTASSIUM NITRATE. — Pure in 50-kilo sacks, 2s. 1d. per kilo.

POTASSIUM PERMANGANATE. — B.P. in 1-cwt. lots, 2s. 0¾d. per lb. Technical 218s. 6d. per cwt.; 1-ton lots, quoted at 207s. per cwt.

POTASSIUM PHOSPHATE. — B.P.C. 1949, 50-kilo kegs of POWDER, 8s. 3d. per kilo, GRANULAR, 8s. 9d.

POTASSIUM QUADROXALATE. — 1-cwt., 3s. 6d. per lb.

POTASSIUM SULPHATE. — B.P.C. '49, 1s. 2d. per lb.

POTASSIUM THIOCYANATE. — 50-kilo lots, 11s. 6d. per kilo in kegs.

PYROGALLIC ACID. — One-cwt. pure crystals, 27s. 9d. per lb.

SODIUM ACETATE.—B.P.C. 1949, 50-kilos, 4s. 0½d. per kilo.

SODIUM BENZOATE. — One-ton lots, 2s. 7½d. per lb.; 1-cwt., 2s. 9½d.

SODIUM BICARBONATE,—B.P., 1-cwt. bags £19 3s. per ton for 8-ton lots.

SODIUM BROMATE.—50-kilo lots, 12s. per kilo, 1,000 kilos, 9s. 6d. per kilo.

SODIUM CARBONATE.—(Per cwt.), B.P.C. exsiccated, 1-cwt., 90s.; 5-cwt., 85s.; 1-ton, 80s.

SODIUM CHLORIDE. — Vacuum dried, 172s. 9d. per ton in paper sacks for 6-ton lots, delivered London.

SODIUM CYCLAMATE. — Fifty-kilo lots offered at 13s. 6d. per kilo in free packages, delivered.

SODIUM FLUORIDE. — B.P.C., 1934, 50-kilo kegs, 8s. 7d. per kilo.

SODIUM HYDROXIDE. — FLAKE, £36 15s. per ton in 8-ton lots, STICKS, B.P., 50 kilos, 10s. 10d. per kilo in 5-kilo tin; PELLETS, 7s. 6d. kilo.

SODIUM METABISULPHITE. — B.P. grade £47 17s. 6d. per ton. Commercial grade less 10s. per ton.

SODIUM NITRATE. — B.P. 50-kilo kegs, 5s. 8d. per kilo.

SODIUM PERBORATE. — (Per ton). TETRAHYDRATE (minimum 10 per cent. available oxygen) £142 5s. in 1-cwt. kegs; £134 15s. in 1-cwt. bags; PERBORATE MONOHYDRATE (minimum 15 per cent. available oxygen) is £309 15s.

SODIUM PERCARBONATE. — (Per ton). £173 15s. in kegs (bags £7 10s. per ton lower) for minimum 12½ per cent. available oxygen.

SODIUM PHOSPHATE. — B.P. crystals, 4s. 11d. per kilo; POWDER, 6s. 1d.

SODIUM SALICYLATE. — One-ton lots in bulk, 3s. 9d. per lb.; 5-cwt., 3s. 10d.; 1-cwt., 4s.

SODIUM SULPHATE.—B.P. from £16 per ton as to crystal. B.P. exsiccated about £66 per ton.

SODIUM SULPHITE. — Four-ton lots: Commercial crystals, £27 to £28 10s. as to container; photo. quality, £33 per ton in bags.

SODIUM THIOSULPHATE. — Photographic crystals in paper-lined bags, £36 per ton.

SULPHATHIAZOLE. — 100 kilos, 32s. per kilo; 50 kilos, 33s.

ZINC CARBONATE.—One-cwt. lots, 2s. 0½d. per lb.; 1-ton, 1s. 9d.

ZINC CHLORIDE. — B.P.C. 1954, cake, 15s. 5d. per kilo; sticks, 17s. 3d.

ZINC OXIDE.—Two-ton lots, B.P. grade, are now £131 10s. per ton; 1 ton, £132 10s.

ZINC PEROXIDE. — One-cwt. lots of B.P. 5s. 3d. per lb.

ZINC SULPHATE.—B.P., 50 kilos, 3s. 6½d. per kilo.

Industrial Chemicals, Solvents

ACETALDEHYDE. — The 100 per cent. is £122 per ton minimum 1-ton lots.

ACETATES. — Per ton, spot in drums: AMYL, technical, £254 and B.S.S., £256. BUTYL, £136; ETHYL, £113; ISOBUTYL (80 per cent.), £111 and pure, £115; ISOPROPYL, £110; METHYL, 80 per cent., £142.

ACETIC ANHYDRIDE. — 12-ton lots £103 per ton; 2½-ton, £107, tanker deliveries.

ACETONE. — One-ton lots spot £66 per ton in drums.

N-BUTYL ALCOHOL. — One-ton lots in drums, £127 per ton and one-drum lots, £136 per ton.

CARBON TETRACHLORIDE. — In 40-gall. drums, 1 ton and under 2 tons, £83 15s.; 4 tons and upwards, £82 5s.

ISOPROPYL ALCOHOL. — Technical grade (99 per cent.) in tank car lots from 4s. 6d. to 4s. 8d. per gall.; anhydrous in drums, 7s. 1d. to 7s. 4½d. per gall.; in bulk, 6s. 11d. to 7s. 1d.

METHYL ETHYL KETONE. — One-ton lots, £111 10s. per ton.

NAPHTHALENE. — Contract rates for phthalic grade are from £25 per ton in bulk, ex works; lower crystallising whizzed grades from £20 to £25 per ton ex works; ball and flake, £71.

PHTHALATES. — Prices (per ton) one-ton lots in drums; DI-BUTYL, £159; DI-ISOBUTYL, £154; DI-ETHYL, £171; DI-METHYL, £161.

Crude Drugs

ACONITE. — Spot, Spanish, *napellus*, 2s. 4d. per lb.; shipment, 2s. 3d., c.i.f.

AGAR. — Kobé No. 1, 13s. per lb. in bond; shipment, 12s. 6d., c.i.f. Spanish scarce on the spot at 15s. 6d., duty paid, nominal.

ALOES. — Primes, 270s. per cwt. spot. Shipment, 265s., c.i.f. Curaçao, spot, 265s.; 260s., c.i.f.

ANISE. — Chinese STAR, 152s. 6d. per cwt. spot, duty paid; f.a.q. for shipment, 115s., c.i.f.

ANNATTO. — Madras, f.a.q. seed, spot, 300s. per cwt.; no shipment offers.

BALSAMS.—Per lb.: CANADA: 24s., spot. COPAIBA: B.P.C. 11s. 6d. PERU: 23s. 6d., afloat; shipment, 22s., c.i.f. TOLU: B.P., from 10s. 6d. to 27s. 6d.

BAY.—LEAVES, 1s. 9d. per lb., spot.

BELLADONNA.—LEAVES, 6s. per lb., nominal, spot. ROOT, 1s. 8d. per lb., spot; shipment, 1s. 7d., c.i.f.

BENZOIN.—Sumatra block spot from £20 to £40 per cwt. as to quality.

BUCHU.—Spot, 4s. 9d. per lb.

CALAMUS. — ROOT, 100s. per cwt., spot, 87s. 6d., c.i.f.

CAMPHOR. — B.P. powder for shipment, 5s. 3d. per lb., c.i.f.; spot, 6s. 6d., duty paid.

CARDAMOMS. — Aleppy greens, spot, 19s. per lb.; shipment, 21s. 6d., c.i.f.

CASCARA. — Spot, 225s. per cwt.; shipment, 218s., c.i.f.

CASSIA.—*Fistula*, 105s. per cwt. spot; *lignea*, whole shipment, 202s. 6d., c.i.f.; selected broken, 192s. 6d., c.i.f.

CHAMOMILE.—Belgian flowers scarce at from 20s. per lb., upwards spot; German type, 7s. 6d.

CHERRY BARK. — Thin natural, 2s. 2d. per lb., shipment, 2s., c.i.f.

CHILLIES.—Zanzibar, spot, 320s. per cwt.

CINNAMON.—BARK, Seychelles, 130s. cwt. spot; shipment, 110s., c.i.f.; QUILLS, Ceylon (per lb., c.i.f.): 4 O's, 10s.; single O, 9s. 4d.; quillings, 5s. 3½d.

CLOVES. — Zanzibar, spot, 2s. 10½d. per lb. standard grade, shipment, 2s. 7¾d., c.i.f.

COCHINEAL. — Canary Isle silver-grey, 21s. per lb.; black brilliant, 22s. Peruvian silver-grey, 16s. 6d. landed, 15s. 9d., c.i.f.

COCILLANA.—Bark 1s. 6d. per lb. on the spot.

DIGITALIS.—*Purpurea* leaves, 2s. 6d. per lb.

ELEMI. — Spot, 1s. 8d. per lb.; shipment: new crop, 1s. 5d., c.i.f.

ERGOT. — Portuguese, spot, 9s. 9d. per lb.; shipment, 9s. 6d., c.i.f.

GENTIAN. — Root, 190s. per cwt. spot; shipment, 185s., c.i.f.

GINGER. — (Per cwt.) Nigerian, July–August shipment (c.i.f.), split, 85s.; peeled, 210s. African, spot, 235s. per cwt.; shipment, July–August, 225s., c.i.f. Jamaican No. 3, spot, 325s. shipment, 280s., c.i.f. Cochin, spot, 300s., July–August shipment, 312s. 6d., c.i.f.

GUM ACACIA.—Kordofan cleaned sorts, 162s. 6d. per cwt., spot; shipment, 148s., c.i.f.

HONEY. — (Per cwt.). Australian light amber, spot, 115s. to 120s.; and medium amber, 110s. to 115s.; Argentine, 110s. to 115s.; Canadian, 175s. to 180s.; Mexican spot, 115s. to 120s.

IPECACUANHA. — High testing material short on spot. Matto Grosso for shipment, 54s. 6d. per lb., c.i.f. and landing, 55s. Costa Rican, 74s. spot nominal; Colombian, 54s. 6d., c.i.f.

MACE.—Whole pale blade, 14s. per lb. for forward delivery.

MENTHOL.—(Per lb.). Chinese for shipment, 29s., c.i.f.; spot, 30s., in bond. Brazilian for shipment, 30s., c.i.f.; spot, 33s. 6d. duty paid and 31s. in bond.

MERCURY. — Spot nominally £265 per flask of 76-lb. ex warehouse.

NUTMEGS.—(Per lb.). West Indian, spot, 80's, 9s.; 110's, 7s. 6d.; sound unassorted, 7s.; defectives, 5s. 6d. East Indian for shipment, 80's, 8s. 6½d.; 110's, 6s. 11d., b.w.p. 4s. 4½d., c.i.f.

NUX VOMICA.—Cochin, 95s. per cwt. on the spot; shipment, 85s., c.i.f.

ORANGE PEEL. — Spot: Sweet ribbon, 1s. 8d. per lb., bitter quarters: West Indian, 10½d.; Spanish, 1s. 9d.

PEPPER. — White Sarawak spot, 3s. 1½d. to 3s. 3d. per lb.; shipment, 3s. 1d., c.i.f. Black Sarawak, 3s. 0½d. spot; shipment, 2s. 7¾d., c.i.f. Black Malabar, spot, 3s. 5d. per lb.; shipment, 380s. per cwt., c.i.f.

PODOPHYLLUM.—Spot per cwt.: *Emodi*, 235s.; 220s., c.i.f.

QUILLAIA.—For shipment, 135s. per cwt. c.i.f.; spot, 125s.

RHUBARB.—Manufacturing grades offered at from 5s. to 8s. 6d. per lb., other grades at 12s. 6d. and 15s. 6d.

SAFFRON.—Mancha superior spot, 625s. per lb.; Rio, 600s.

SARSAPARILLA. — Jamaican native red spot, 3s. 6d. per lb.; shipment, 3s., c.i.f.

SEEDS. — (Per cwt.).—ANISE.—Turkish, 200s., duty paid; Spanish, 255s., duty paid. CARAWAY.—Dutch, 137s. 6d., duty paid. CELERY.—Indian, 175s., spot; July–August shipment, 150s., c.i.f. CORIANDER.—Moroccan, 57s., duty paid; shipment easier at 45s. 6d., c.i.f. Rumanian whole seed unchanged at 52s. 6d., c.i.f. CUMIN.—Indian, 300s.; Moroccan, 350s., duty paid; shipment, Indian, 255s., c.i.f.; Moroccan, 247s. 6d., c.i.f. DILL.—Indian, 120s., spot; shipment, 90s., c.i.f. FENNEL.—Chinese, 130s., duty paid; shipment, Chinese, 112s. 6d., c.i.f.; Indian, 135s., c.i.f. FENUGREEK. — Moroccan, 47s. 6d., duty paid; shipment now quoted at 38s, c.i.f. MUSTARD.—English from 65s. to 85s. as to quality.

SENEGA.—Spot, 19s. per lb.; new crop, July–August shipment, 17s. 6d., c.i.f.

SENNA. — (Per lb.). Tinnevelly LEAVES spot: Prime No. 1, 2s.; No. 3, f.a.q., 1s. 1d. Shipment: No. 3, 1s., c.i.f. PODS: Tinnevelly hand-picked, 1s. 8d. to 2s. as to quality; spot, manufacturing, 1s. 2d.; shipment, 11d., c.i.f. Alexandria PODS: Hand-picked from 7s. to 8s.; manufacturing, forward, 2s. 6d., c.i.f.

SLIPPERY ELM BARK. — Spot offered at 3s. 4d. per lb.

SQUILL. — Italian, spot, 185s. per cwt.; shipment, 170s., c.i.f.

STRAMONIUM.—Continental LEAVES, 85s. per cwt., spot.

TONQUIN BEANS.—Para spot, 4s. 6d. per lb.; shipment, 3s. 10d., c.i.f.

TRAGACANTH.—Ribbon, No. 1, £175 per cwt.; No. 2, £160.

TURMERIC. — Madras finger on spot is 127s. 6d. per cwt.; shipment now quoted at 97s. 6d., c.i.f.

VANILLIN. — (Per lb.). 5-cwt. lots, 21s. 6d.; 1-cwt., 21s. 9d.; 56-lb., 22s.; small quantities, 22s. 6d. All plus temporary import charge.

VALERIAN ROOT.—Indian, spot, 210s. per cwt.; shipment, 200s., c.i.f.

WAXES. — (Per cwt.). BEES' — Dar-es-Salaam, 445s.; shipment 415s. Sudanese, spot, 400s., in bond; shipment, 385s., c.i.f. CANDELILLA, spot, 465s.; forward, 460s. landed. CARNAUBA, fatty grey, spot, 320s.; shipment, 295s., c.i.f.; prime yellow, spot, 660s.; shipment, 595s., c.i.f.

WITCH HAZEL LEAVES.—Spot quotations are 2s. 2d. per lb.; shipment, 2s. 1d., c.i.f.

Essential and Expressed Oils

CALAMUS.—Spot, from 70s. to 100s. per lb. as to origin.

CARAWAY.—From 40s. to 45s. per lb. as to source.

CASSIA.—Spot from 55s. per lb. for 80–85 per cent.

CEDARWOOD. — American from 7s. 6d. per lb. on the spot; East African, 7s. 6d.

CINNAMON.—Best English-distilled, 720s. per lb.; other B.P. oils from 22s. to 120s. per lb. Ceylon leaf, 22s.; Seychelles from 9s. spot.

CITRONELLA. — Ceylon, spot, 5s. 6d.; shipment, 5s. 2d. per lb., c.i.f.; Formosan and Chinese, 4s. 7½d., in bond; shipment, 4s. 6d., c.i.f.

CORIANDER.—From 34s. to 45s. per lb. spot, as to origin.

CUBEB.—Spot supplies of imported are 86s. per lb.

CUMIN.—English distilled oil, 125s. per lb., imported 90s. to 105s.

EUCALYPTUS. — B.P. 70–75 per cent., 5s. 9d. per lb.; 80–85 per cent., 6s. 3d.

FENNEL.—Spanish sweet, 16s. per lb., duty paid.

GRAPEFRUIT.—Spot offers from 8s. per lb.

GINGER. — Imported (per lb.): Indian, 165s.; Chinese, 75s.; Jamaican, 132s. 6d.

LAVENDER SPIKE. — From 30s. to 40s. per lb. as to quality. Replacements quoted around 50s. per lb.

OLIVE.—For shipment: Spanish, £235–£245 per metric ton, f.o.b. Spanish port. Tunisian, £245 to £250 per metric ton, c. and f., London. Spot, £290 to £295 per long ton ex wharf.

PALMAROSA. — Shipment, 50s. per lb., c.i.f.; spot, 54s.

PATCHOULI. — Penang forward is nominally 62s. 6d. per lb., c.i.f.

PENNYROYAL. — Spot, 15s. per lb. duty paid.

PEPPERMINT. — *Arvensis:* Chinese for shipment, 11s. 3d., c.i.f., spot, 11s. 3d. Brazilian for shipment, 12s. c.i.f.; spot, 11s. 10½d. *Piperita:* Italian, 48s. to 60s., spot. American from 35s. per lb. as to make.

PETITGRAIN. — Paraguay for shipment, 14s. 9d., c.i.f.; spot, 15s. 6d. per lb.

PIMENTO. — English-distilled berry from 192s. per lb. and imported, 35s.

PINE. — *Pumilionis*, 30s. per lb.; *sylvestris*, 10s.; *abietis*, 16s.

ROSEMARY. — Spanish, 14s. per lb. duty paid.

RUE.—Spanish is 22s. 6d., per lb., spot.

SAGE.—Spanish, 22s. 6d. per lb.; Dalmatian, 26s.

SANDALWOOD. — Mysore, spot 11s. 10½d. per lb. East Indian for shipment, 112s., c.i.f.

SPEARMINT.—American oil on the spot, 35s. per lb.

TANGERINE.—Sicilian best quality about 46s. per lb.

VETIVERT. — Bourbon, spot, 85s. to 90s. per lb.

YLANG YLANG. — Best oil quoted about 135s.

UNITED STATES REPORT

NEW YORK, JUNE 29: COCILLANA BARK was raised five cents to 25 cents a lb. SPEARMINT OIL is firmer with the natural $5·25 up 15 cents. Also higher per lb. among ESSENTIAL OILS were LAVENDER SPIKE at $7·25, up 25 cents, EUCALYPTUS, 70-75 per cent., at $1, up five cents, and the 80-85 per cent. at $1·10, up five cents. Only GRAPEFRUIT was lower at 60 cents, down five cents.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," June 16

For pharmaceutical and veterinary substances and infants' and invalids' foods (5)
Device with words ROCHE, 870,199, by Roche Products, Ltd., Welwyn Garden City, Herts.

For pharmaceutical, veterinary and sanitary substances; infants' and invalids' foods; medical and surgical plasters, materials prepared for bandaging; materials for stopping teeth, dental wax; disinfectants; and preparations for killing weeds and destroying vermin (5)
IMPREGUM, 870,084, by Espe Fabrik Pharmazeutischer Praparate G.m.b.H., Seefeld (Obb), Germany.

For pharmaceutical preparations and substances in the form of solutions for administration by infusion (5)
INFUPLAS, 871,920, by Knoll, A.G., Ludwigshafen-on-Rhine, Germany.

For pharmaceutical and veterinary preparations and substances, all consisting of or containing calcium (5)
IECTICALC, 873,050, by A.B. Astra, Apotekarnes Kemiska Fabriker, Sodertalje, Sweden.

For all goods (5)
CALMA-PLEX, 873,331, by Calma-Vite Labtories, Ltd., Brighton, Sussex. RESIGUARD, 874,322, by Aspro-Nicholas, Ltd., Slough, Bucks.

For pharmaceutical preparations and substances (5)
HEXAQUINE, 874,632, by Francois Georges Max Prevet, Paris, France.

For pharmaceutical preparations and substances for human and veterinary use; sanitary substances and disinfectants (5)
NILVERM, 875,186, by Imperial Chemical Industries, Ltd., London, S.W.1.

For veterinary preparations (5)
HALQUIVET, 876,492, by E. R. Squibb & Sons, Ltd., Twickenham, Middlesex.

For all goods, none being in liquid form (5)
SKOL, 805,840, by Scott & Bowne, Ltd., London, W.1.

For electric razors and parts (8)
REMINGTON SELECTRIC, 872,892, by Sperry Rand Corporation, Wilmington, Delaware, U.S.A.

For photographic and cinematographic apparatus and instruments and parts and fittings (9)
MINOLTINA, 871,021, by Japanese Cameras, Ltd., Stoke-on-Trent, Staffs.

For photographic and cinematographic cameras; darkroom timing apparatus, parts and fittings and lenses (9)
ELTRON, 871,056, by Apparatus and Instrument Co., Ltd., Hounslow, Middlesex.

For sterilising apparatus for surgical purposes (10)
MOTOCLAVE, 875,280, by British Steriliser Co., Ltd., Ilford, Essex.

From the "Trade Marks Journal," June 23

For artificial sweetening preparations in cube form (1)
SIMACUBE, 876,846, by Andomia Products, Ltd., Bradford, Yorks.

For perfumes, cosmetics and bath salts (not medicated) for toilet purposes (3)
O.BA.O, B851,386, by Cadoricin, Bobigny Seine, France.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, soaps and essential oils (3)
Device with words NUFAZ KOSINAL COSMETICS, 863,086, by Joseph Benedict Drennan, Tokyo, Japan. PACE SETTER, 872,252, SNOWFLOWER, 872,254, by Yardley & Co., Ltd., London, E.15.

For detergents (not for use in industrial or manufacturing processes) and liquid cleaning preparations (3)
STERPOL, 865,733, by Stellar Oils, Ltd., Glasgow, S.W.2.

For all goods (3)
GOSSIP, 866,395, by Dermacult (London), Ltd., London, W.C.2. CHEETAH, 875,495, by Finn Birger Christensen, Copenhagen, Denmark.

For preparations for the hair consisting of or containing bleaching preparations in oxide form (3)
CLAIROL CLAIROXIDE, 865,897, by Bristol-Myers Co., New York, U.S.A.

For detergents for washing purposes (3)
STE-RINSE, B871,862, by Sterwin, A.G., Zug, Switzerland.

For all goods, but not including preparations for cleaning, bleaching, polishing, or preserving leather (3)
SONA, 872,118, by Sterwin, A.G., Zug, Switzerland.

For detergents (not for use in industrial or manufacturing processes) (3)
TOKEM, 872,961, by Unilever, Ltd., Port Sunlight, Ches.

For perfumes, toilet preparations (not medicated), cosmetic preparations, eau de cologne and soaps (3)
RIOT, 873,202, by Picot, Ltd., London, W.6.

For hand creams being non-medicated toilet preparations (3)
WISPRENE, 873,737, by Oralite Co., Ltd., Blackpool, Lancs.

For cosmetics, perfumes, non-medicated toilet preparations and hair lotions (3)
MULCEA, 875,282, by Ayer Iernah Products, Ltd., London, W.1.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles (not included in other classes), shampoos, soaps, and essential oils (3) *and for deodorants* (5)
SECRET SERVICE, 873,376-77, by Sidney Margolis, Ltd., London, S.E.17.

For preparations for killing flies (5)
FLY-TOX, 816,717, by Scott & Bowne, Ltd., London, W.1.

For all goods (5)
CARIFAX, 859,751, by Lloyds' Research, Ltd., London, W.1. ORPA, 864,658, by Chugai Seiyaku, K.K., Tokyo, Japan. SCADAN, B871,262, by Dome Chemicals, Inc., Elkhart, Indiana, U.S.A. PEPTAIDS, 871,694, by Britanol, Ltd., Leeds, Yorks. DROPERIDOL, 872,911, by Janssen Pharmaceutica, N.V., Beerse, Belgium. PENICALS, 874,054, by Lovens Kemiske Fabriks Handelsaktieselskab, Ballerup, Denmark. AFESIN, 875,416, by Farbwerke Hoechst, A.G., Frankfurt on Main-Hoechst, Germany.

PATENTS

COMPLETE SPECIFICATIONS ACCEPTED

From the "Official Journal (Patents)," June 10

Detergent compositions. Procter & Gamble Co. 998,685.

Urea compounds and their herbicidal use. Monsanto Co. 998,702.

Shaving cream. Dow Corning Corporation. 998,706.

Progesterone derivative and preparation thereof. E. Merck, A.G. 998,710.

Hydroxyphenylacetic acid derivatives. I. R. Geigy, A.G. 998,721.

Alpha-hydroxyisobutyric acid production. E. I. du Pont de Nemours & Co. 998,722.

Stopper for closing containers, such as bottles, flasks and the like. H. Lohrer. 998,747.

Device for dispensing pills, tablets and the like. Ortho Pharmaceutical Corporation. 998,765.

Production of carbon tetrachloride. Imperial Chemical Industries, Ltd. 998,804.

Benzothiadiazine compounds. Merck & Co., Inc. 998,809.

Preparation of alpha-3,4-dichlorophenyl-alpha methoxy acetic acid and intermediates in the production thereof. Nederlandsche Combinatie voor Chemische Industrie, N.V. 998,828.

Process for the preparation of 2-halothiobenzamides. Shell Research, Ltd. 998,833-34.

(γ-alkyl-idenearyl)-phenyl compounds. Merck & Co., Inc. 998,835.

Digit embracing surgical pads. Scholl Mfg. Co., Ltd. 998,840.

Pyridine derivatives. Rhone-Poulenc, S.A. 998,852.

Imido compounds, their production and use. Monsanto Co. 998,869.

N-benzodioxanyl-carbamates. Lakeside Laboratories, Inc. 998,878.

Pesticidal compositions. Shell International Research Maatschappij, N.V. 998,905.

Photographic material. Kodak, Ltd. 998,950.

Phosphorus-containing nitrophenyl esters. Farbenfabriken Bayer, A.G. 998,920.

Thermographic and heat developable photographic copying materials. Kodak, Ltd. 998,949.

Manufacture of photographic materials. Mitsubishi Paper Mills, Ltd. 998,954.

Silver salt diffusion transfer processes and material for use therein. Gevaert Photo-Producten, N.V. 998,955-56.

Medicines having a diuretic action. Soc. Civile Nova. 998,971.

Thiourea dioxide derivatives. Hardman & Holden, Ltd. 998,975.

Phosphorus-containing oxime derivatives. American Cyanamid Co. 998,977.

Automatic photo-electric aperture control mechanism for photographic apparatus. Sangamo Weston, Ltd. 998,891.

Closures for collapsible tubes. County Laboratories, Ltd. 998,984.

Siloxane antifoam compositions. Dow Corning Corporation. 998,991.

Organosilicon compositions. Dow Corning Corporation. 998,992.

Sulphur-containing organosilicon compounds. Dow Corning Corporation. 998,993.

Organo silicon compounds. Dow Corning Corporation. 998,994.

Amides containing amino groups, process for their preparation and their use. CIBA, Ltd. 998,995.

Derivatives of 1,5-diarylpyrrole-2-propionic acid. Parke, Davis & Co. 998,996.

Photographic camera. Voigtlander, A.G. 998,997.

Composition for promoting the growth of hair. G. Shimazaki. 999,063.

Preparation of hexafluorobenzene and fluorochlorobenzenes. Imperial Chemical Industries, Ltd. 999,069.

Sweetening compositions. Unilever, Ltd. 999,073.

Device for use in vaccination. Cooper, McDougall & Robertson (N.Z.), Ltd. 999,076.

Pharmaceutical compositions. N. Gueritee. 999,086.

Benzo (a) quinolizine derivatives and method for making them. Wellcome Foundation, Ltd. 999,091.

Method for making benzo (a) quinolizine derivatives. Wellcome Foundation, Ltd. 999,092.

Manufacture of 3,4-dihydroisoquinoline compounds. Wellcome Foundation, Ltd. 999,093.

Benzo (a) quinolizine derivatives and their preparation. Wellcome Foundation, Ltd. 999,094.

Preparation of quinolizine derivatives. Wellcome Foundation, Ltd. 999,095.

Manufacture of emetine. Wellcome Foundation, Ltd. 999,096.

2-Isoxazolin-5-ones and fungicidal compositions containing them. Imperial Chemical Industries, Ltd. 999,097.

Izoxazole derivatives and fungicidal compositions containing them. Imperial Chemical Industries, Ltd. 999,098.

Free-flowing dichloroisocyanurate compositions. Monsanto Co, 999,105.

Repository antimalarial compositions. Parke, Davis & Co. 999,121.

Organosilicon compounds and their use. Rhone-Poulenc, S.A. 999,123.

Hydrazine derivatives and the process for the manufacture of same. F. Hoffmann-La Roche & Co., A.G. 999,124.

Thionothiolphosphonic acid esters. Farbenfabriken Bayer, A.G. 999,126.

Coumaranyl-n-methyl-carbamic acid esters. Farbenfabriken Bayer, A.G. 999,128.

Orthopædic appliances. C. R. Terron. 999,143.

Photographic developing compositions. Ilford, Ltd. 999,145.

Production of photographic prints. Ilford, Ltd. 999,146.

Fertilisers. Imperial Chemical Industries, Ltd. 999,148.

Photographic products and processes. International Polaroid Corporation. 999,162.

Magazine-type transparency projector. Rollei-Werke Franke & Heidecke. 999,175.

Film projectors. Eugen Bauer, G.m.b.H. 999,198.

Herbicidal composition. Mirvale Chemical Co., Ltd. 999,202.

Reductive splitting of an oxido ring in keto-steroids and compounds obtained thereby. E. Merck, A.G. 999,225.

British patents specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from July 21.

NEW COMPANIES

P.C.=Private Company. R.O.=Registered Office

W. T. COLTMAN (RETAIL), LTD. (P.C.).—Capital £100. To carry on the business of retail pharmaceutical, consulting, analytical, manufacturing and general chemists, etc. Directors: Alan H. Greenwell, M.P.S., and Johanna M. Greenwell, M.P.S. R.O.: Hintons Buildings, South Street, Middlesbrough.

COSMETICS LABORATORIES, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in toilet and cosmetic preparations, etc. Directors: Sydney J. Baker, Irene L. Baker and Maurice R. Lawrance. R.O.: 5 Albemarle Street, London, W.1.

DEODORFEST, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in horticultural, veterinary, disinfectant, medical and other products, etc. Directors: Robert J. B. Wilson and Walter Vine. R.O.: Somerset House, Blagrave Street, Reading.

GRANT CHEMISTS, LTD. (P.C.).—Capital £100. To carry on the business of consulting, analytical, manufacturing, pharmaceutical and general chemists, etc. Directors: Howard D. Grant, M.P.S., and Michael Grant. R.O.: 191 Whitchurch Lane, Canons Park, Edgware.

GREENWOOD & CHAPMAN (RETAILERS), LTD. (P.C.).—Capital £5,000. To carry on the business of chemists, etc. Directors: George Greenwood, Thomas B. Chapman, M.P.S., Dennis Thornton, and John Sheard. R.O.: 24 The Town, Thornhill, Dewsbury.

KENTFORD CHEMICAL CO., LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in chemicals, etc. Directors: William B. Leach and Lily Leach, Meddler Stud, Kentford, near Newmarket.

MAYFAIR CHEMICALS, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in chemicals, drugs, etc. Directors: Emanuel F. Coleiro, Patricia E. Baker and Michael Critein. R.O.: 40 Shepherd Street, London, W.1.

MODELCHEST, LTD. (P.C.).—Capital £100. To carry on the business of selling agents and consultants to the pharmaceutical trade, etc. Subscribers: Jean Herbert and Thomas A. Herbert, 156 Strand, London, W.C.2.

F. E. NORBURN, LTD. (P.C.).—Capital £10,000. To acquire the business of chemists and druggists carried on by Francis E. Norburn at Sileby, and Mountsorrel, Leics, etc. Directors: Francis E. Norburn, M.P.S., Jeannie E. Norburn and John E. Powderly, M.P.S. R.O.: Halifax Buildings, Granby Street, Leicester.

PHILLIPS & COVENTRY, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in chemicals of all kinds for industrial purposes, etc. Directors: Seymour C. E. Phillips, Agnus T. Phillips, Desmond Hare and Henry Turner. R.O.: Finsbury Court, Finsbury Pavement, London, E.C.2.

PORCE-MASTER SERVICE (HOSPITALS), LTD. (P.C.).—Capital £100. To carry on business of a Porce-Master Service company, etc. Subscribers: Leonard H. Lewis and Francis A. Dean. R.O.: 17 New Bond Street, London, W.1.

PRATT CHEMIST (KILBURN), LTD. (P.C.).—Capital £2,500. To carry on the business of wholesale and retail chemists and druggists, etc. Directors: William T. Pratt, M.P.S., Marjorie A. Pratt, M.P.S., and Peter W. Pratt, M.P.S. R.O.: 3 Great James Street, London, W.C.1.

SLIMAMEALS, LTD. (P.C.).—Capital £100. To carry on the business of chemists and druggists; grocery and provision dealers, etc. Directors: George W. Taylor, M.P.S., and Elizabeth H. Taylor. R.O.: 10 Grant Street, Bradford, 3.

STOCKWOOD CHEMISTS, LTD. (P.C.).—Capital £1,000. Directors: David A. Salt, M.P.S., Priory Close, Manor Road, Abbots Leigh, Bristol, and William J. Bray.

PHILLIP STONE (CHEMIST), LTD. (P.C.).—Capital £100. To carry on the business of chemists, druggists, etc. Directors: Phillip Stone, M.P.S., and Mrs. Daphne B. Stone. R.O.: 62A Myrtle Street, Liverpool.

M. A. STURGESS, LTD. (P.C.).—Capital £100. To carry on the business of chemists, librarians, etc. Directors: Michael A. Sturgess, M.P.S., and Margaret Sturgess. R.O.: 4 Coventry Road, Bedworth, Warwicks.

SYNTEX PHARMACEUTICALS, LTD. (P.C.).—Capital £100. Subscribers: Janet Ramsey and Christine Keal. R.O.: 128 Queen Victoria Street, London, E.C.4.

T. H. TOTTY, LTD. (P.C.).—Capital £1,000. To carry on the business of chemists and druggists, etc. Directors: Thomas H. Totty, M.P.S., and Olive E. Totty. R.O.: 28 Walmley Road, Sutton Coldfield, Warwicks.

TRYNANT CHEMISTS, LTD. (P.C.).—Capital £100. To carry on the business of chemists, druggists, etc. Directors: Sidney S. Frankel, M.P.S., 170B Jamaica Road, London, S.E.16, and Kenneth L. Lancer.

UPLANDS PHARMACY, LTD. (P.C.).—Capital £100. To carry on the business of selling agents and consultants to the pharmaceutical trades. Directors: Richard F. Rudgley, M.P.S., and Margaret E. Rudgley. R.O.: Miller Drive, Fareham, Hants.

WOODSIDE PHARMACY, LTD. (P.C.).—Capital £100. To carry on the business of retail chemists and druggists, etc. Directors: Arnold B. Hamburg, M.P.S., and Brian R. Cohen, M.P.S. R.O.: White Horse Buildings, White Horse Street, Boar Lane, Leeds, 1.

PRINT AND PUBLICITY

PRESS ADVERTISING

BRISTOL-MYERS CO., LTD., Stonefield Way, South Ruislip, Middlesex: Ingram lanolin gold. In national Press (and on commercial radio).

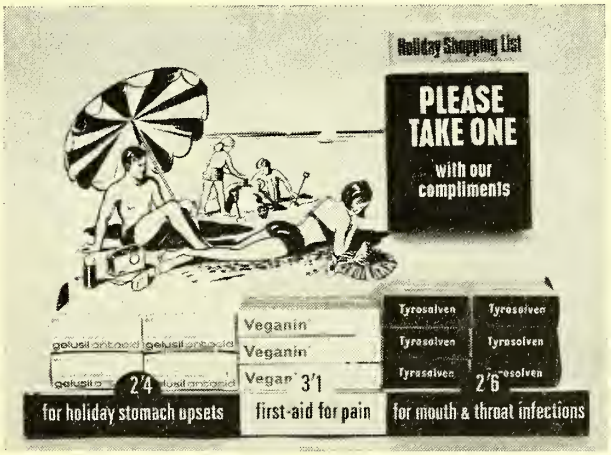
BURROUGHS WELLCOME & CO. (The Wellcome Foundation, Ltd.), Wellcome Building, Euston Road, London, N.W.1: Marzine. In national newspapers and magazines.

APPROPRIATE: The new display piece for the Optrex Traveller available to chemists on request, from Optrex, Ltd., Wadsworth Road, Perivale, Greenford, Middlesex.

G. COSTA & CO., LTD., Staffordshire Street, London, S.E.15: Instant Postum. In *Daily Mail, Observer, Sunday Telegraph* and *Family Doctor*.

DIXOR, LTD., St. Leonard's Road, London, S.W.14: Velouty. In women's magazines.

ELIDA, LTD., 43 Portman Square, London, W.1: Sunsilk shampoo premium offer (gold-plated brooch). In *Woman*, July 12.



HOLIDAY THEME: This counter display produced by William R. Warner & Co., Ltd., Eastleigh, Hants, for their products Gelusil indigestion tablets, Veganin tablets and Tyrosolven antibiotic lozenges, has a topical, holiday theme. The unit incorporates a dispenser for leaflets which provide a comprehensive list of holiday requisites that can be purchased from a chemist's shop.

CATALINE CO., Linthwaite Laboratories, Huddersfield: Cataline. In *Farmer's Weekly, British Farmer, Dairy Farmer* and *Pig Farming*.

CHEMISTS' BROKERS, Crown House, Morden, Surrey: Salvelox plasters. In *Daily Express, Daily Mirror, Woman*, and *Family Doctor*.

VISIBLE REMINDER: New display stand to hold twelve assorted Goya Spray Set, currently being distributed by Goya, Ltd., 161 New Bond Street, London, W.1, carries a head card bearing the slogan from the product's current national advertising campaign "It's Invisible."

PUBLICATIONS

Booklets and Leaflets

APPLEO CHEMICALS, LTD., Salisbury Road, Industrial Estate, Uxbridge, Middlesex: "Precautions in handling chemical cleaning solutions" (16-p. booklet).

WESTBROOK LANOLIN CO., Subsidiary of Woolcoombers, Ltd., P.O. Box 227, Daisy Bank, Duckworth, Bradford, 9, Yorks: Golden Dawn liquid lanolins (16-p. booklet detailing product specifications).

COMING EVENTS

Wednesday, July 7

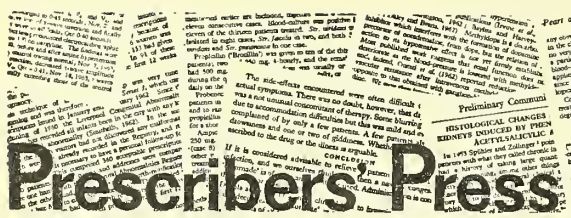
BOURNEMOUTH BRANCH, PHARMACEUTICAL SOCIETY, Cornelia nurses' hostel, Poole, at 1 p.m. "Management of the Deaf Patient."

COUNTY OF SOMERSET and BATH BRANCHES, PHARMACEUTICAL SOCIETY, Bath Arms hotel, Bath Street, Cheddar, Somerset, at 7.30 p.m. Skittles contest for the Galen cup.

Advance Information

INTERNATIONAL CONGRESS ON INDUSTRIAL CHEMISTRY, Brussels, Belgium, September 10-21, 1966. (Further information from the general secretariat, 49 Square Marie-Louise, Brussels, 4, Belgium.)

SCIENTIFIC INSTRUMENT MANUFACTURERS' ASSOCIATION OF GREAT BRITAIN, SIMA exhibition, Bucharest, Rumania, October 26 to November 4.



What doctors are reading about developments in drugs and treatments

IN a controlled clinical trial of epsilon-amino caproic acid (E.A.C.A.) on ten high-grade hæmophiliacs, observed differences between hæmorrhagic events occurring during drug therapy, and placebo or no medication did "not quite achieve the conventionally accepted level of statistical significance." However, the authors (from Glasgow Royal Infirmary) report that an appreciable reduction in spontaneous bleeding episodes was recorded during the administration of E.A.C.A. They consider that a further large-scale study is warranted and suggest that the drug, or another fibrinolytic inhibitor, may be of prophylactic value in the clinical management of the condition. (*B.M.J.*, June 26, p. 1632.)

REGIONAL anæsthesia can be induced by intra-arterial injections of local anæsthetics distal to a sphygmomanometer cuff, report South African workers. The technique had been investigated because the more often resorted intravenous method often requires doses of anæsthetic above the accepted safe maximum dose and because the authors had evidence to suggest that the anæsthetic acts by diffusion through capillaries in the nerve trunks themselves, causing a large "venous pool" to be filled before effective quantities can reach the point where diffusion can take place. In 306 operations (mainly on infections of the hand) there were twenty-two failures, all due to technical faults. Anæsthetics used were 0·5 per cent. lignocaine without adrenaline (most cases) and mepivacaine. Mean dose was 15 mils compared with 42 mils for the intravenous technique. No toxic reactions were observed. (*Lancet*, June 26, p. 1353.)

THE following comments on drugs appear in *Drugs and Therapeutics Bulletin*: Cooling sprays. If they do decrease pain they should be used more widely for, unlike analgesic drugs, they are unlikely to cause systemic side effects. Sufficient evidence of their effectiveness in different painful conditions has not yet been obtained. Nealbarbitone (Consedal). Useful in the symptomatic treatment of anxiety in neurotic patients and in therapeutic doses is less hypnotic than other barbiturates. (*D.&T.B.*, June 25.)

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical periodicals.

EPSILON-AMINOCAPROIC ACID. Clinical trial of, in severe haemophilia. *Brit. med. J.*, June 26.

INTRA-ARTERIAL REGIONAL ANALGESIA. *Lancet*, June 26.

A NEW CANNULA for introducing balloon-catheters into pleural cavities. *Lancet*, June 26.

ORGANOPHOSPHORUS INSECTICIDES and major mental illness. *Lancet*, June 26.

SOME COUMARIN ANTICOAGULANTS. Identification and assay of. *Canad. Pharm. J.*, May.

NARCOTIC DRUG RESPONSIBILITIES of pharmacists. *J. Amer. Pharm. Ass.*, June.

HAY FEVER AND ALLERGY. *Science J.*, July.

WILLS

MR. R. BERRY, M.P.S., Three Roods Cottage, New Barns Road, Arnside, Westmorland, left £4,929 (£4,346 net).

MR. A. L. BROWN, F.P.S., 16 Mansfield Gardens, Hornchurch, Essex, left £5,389 (£3,838 net).

MR. W. H. C. CARR, M.P.S., 17 Springfield Road, Bilston, Staffs, left £4,741 (£3,512 net).

MR. J. L. COOK, M.P.S., 82 Accrington Road, Burnley, Lancs, left £1,892 (£1,575 net).

COMMERCIAL TELEVISION

The information given in the table is of number of appearances and total screen time in seconds. Thus 7/105 means that the advertiser's announcement will, during the week covered, be screened seven times and for a total of 105 seconds.

Period July 11—18

PRODUCT	London	Midland	North	Scotland	Wales & West	South	North-east	Anglia	Ulster	Westward	Border	Grampian	Eireann	Channel is.
4711	2/30	1/15	2/30	2/30	2/30	2/30	2/30	3/120	8/171	4/74	7/141	6/111	6/111	6/111
Alka-Seltzer	8/171	5/104	6/134	6/111	4/120	7/141	8/194	3/90	3/90	1/30	2/60	7/118	—	1/30
Anadin	4/120	3/44	3/44	4/120	7/164	4/120	4/120	—	—	—	—	—	—	—
Anne French cleansing milk	1/30	—	—	—	—	—	—	—	—	—	—	—	—	—
Arrid deodorant roll-on	—	—	2/60	—	—	—	—	—	—	—	3/21	4/28	—	—
Askit powders	—	—	—	12/84	—	—	—	7/49	7/49	7/49	7/49	7/49	—	7/49
Aspro	7/49	7/49	7/49	7/49	7/49	7/49	7/49	—	—	—	—	—	—	—
Bien-etre splash Cologne	2/30	—	—	—	—	—	—	5/35	5/35	4/28	—	—	—	—
Bisodol	—	—	—	—	5/35	5/35	—	—	2/30	—	—	—	—	—
Bunty baby products	—	—	—	—	—	—	—	1/30	1/30	1/30	1/30	1/30	—	1/30
Dentu-creme	1/30	1/30	1/30	1/30	2/60	2/60	2/60	3/21	3/21	4/66	3/21	—	—	2/14
Dettol	2/14	2/14	3/21	3/21	—	4/66	—	—	—	—	—	4/120	—	—
Freezone	2/60	3/67	4/97	1/30	—	—	1/30	2/14	2/14	2/14	2/14	2/14	—	2/14
Fresh-aire	2/14	2/14	2/14	2/14	2/14	2/14	2/14	3/60	—	2/30	2/30	2/30	—	4/75
Go deodorant	3/60	3/45	3/60	3/45	6/90	3/60	3/45	—	—	—	—	—	—	—
Goddess hair spray	—	—	—	—	—	1/30	—	1/30	2/60	—	2/60	2/60	—	1/30
Immac	3/21	4/120	2/60	1/30	4/120	1/30	3/90	3/90	—	—	—	—	—	—
Lemon Nulon	—	—	—	—	—	—	—	1/30	1/30	1/30	1/30	1/30	3/30	—
Loxene shampoo	4/30	1/30	1/30	1/30	1/30	1/30	1/30	3/45	2/30	3/45	2/30	2/30	—	—
Milk of Magnesia tablets	3/45	3/45	3/45	3/45	—	4/60	3/45	1/15	—	—	—	2/30	—	—
Moorland indigestion biscuits	—	1/15	—	—	—	—	—	4/60	—	—	—	4/60	—	—
tablets	—	3/45	—	—	—	—	—	1/15	1/15	2/30	—	2/30	—	—
Mum Rollette	—	1/15	1/15	1/15	2/30	2/30	2/60	—	—	—	—	—	—	—
Nair	—	2/60	2/60	—	2/60	2/60	2/60	3/45	—	—	—	—	—	2/30
New Quick Kwells	—	3/45	3/45	—	3/45	—	—	—	—	—	—	—	—	—
Polaroid colour pack camera	—	—	—	—	2/75	—	—	1/30	—	1/30	—	—	—	—
Radox	1/30	1/30	—	1/30	2/60	1/30	—	3/45	—	2/30	1/15	2/30	—	2/60
Right Guard	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	—
Rinstead pastilles	2/30	4/60	3/45	2/30	2/30	3/45	2/30	—	—	—	—	—	—	—
Scholl foot exercise sandals	1/45	—	1/45	—	—	1/45	—	—	—	—	—	—	—	—
Signal tooth-paste	4/120	3/90	3/90	4/120	3/90	4/120	3/90	4/120	4/120	3/90	2/60	3/90	—	6/180
Slim Twist razor	4/60	4/60	5/75	6/90	6/90	6/90	6/90	6/90	6/90	6/90	5/75	6/90	—	—
Sparkling Spring	—	—	—	—	—	2/60	—	2/60	1/30	2/60	2/60	1/30	—	1/30
SR tooth-paste	4/120	3/90	3/90	3/90	5/150	4/120	3/90	2/60	2/60	2/60	2/60	3/90	—	3/90
Steradent	3/90	3/90	1/30	2/60	2/60	2/60	1/30	—	—	—	—	—	—	—
Stera-fix	—	1/15	—	—	—	—	—	—	—	—	—	—	—	—
Vaseline petroleum jelly	2/30	—	—	—	—	3/45	—	—	—	—	—	—	—	—
Vitalis	—	1/7	—	—	—	—	—	1/15	—	—	1/15	1/15	—	—
Wright's coal tar soap	1/15	1/15	1/15	1/15	1/15	—	—	2/30	2/30	—	—	—	—	—